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CENTAUR

OR

The Turn Out

BY

E. W. GOUGH.

M.R.S.P.C.A.

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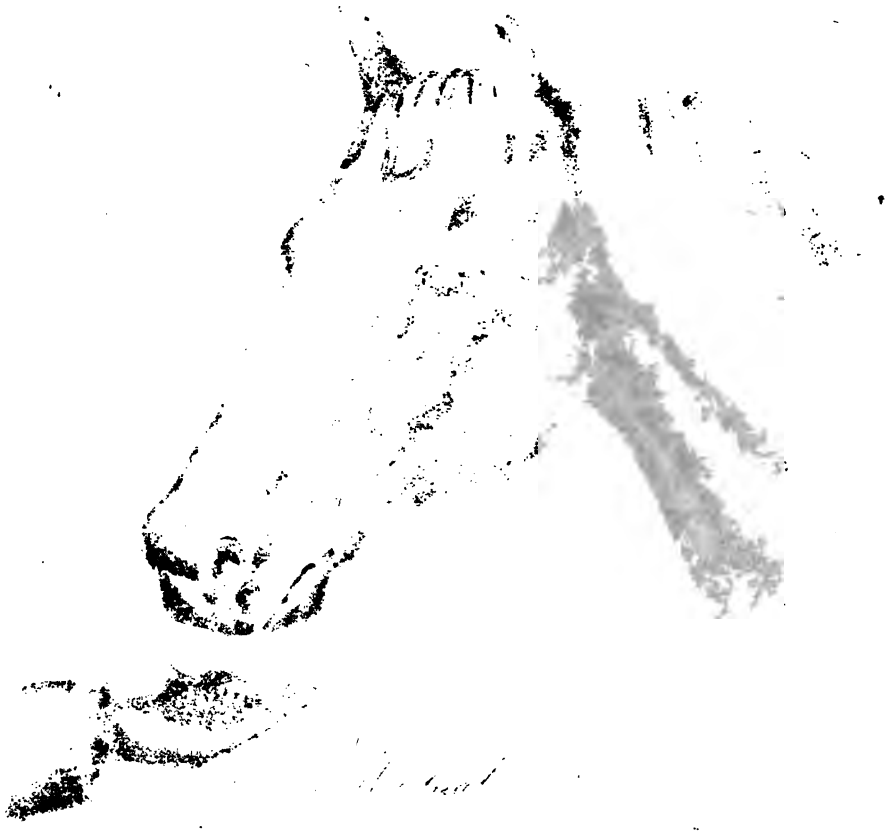

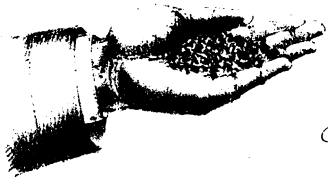

Mutual. Feeling.

"CENTAUR;"

OR

THE "TURN OUT,"

A Practical Treatise on the (Humane) Management of Horses, either in Harness, Saddle, or Stable; with Hints respecting the Harness-Room, Coach-House, &c.

BY

E. W. GOUGH,

MEMBER OF THE ROYAL SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS.

BIBLIOTHECA
FEB 79
BODLEIANA

LONDON:

HARDWICKE AND BOGUE, 192, PICCADILLY.

1878.

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26 δ. d. 42.

"CENTAUR."

"O Circe! O mother of spite,
Speak the last of that curse and imprison me quite,
In the husk of a brute; that no pity may name
The man that I was, that no kindred may claim—
The monster that hunters shun in their flight,
The men in their horror, the women in fright."

PRINTED BY
FREDERICK GREW, MOOR STREET AND ALBERT STREET,
BIRMINGHAM.

PRINTED BY
PERCIVAL GREW, MOOR STREET AND ALBERT STREET,
BIRMINGHAM.

The Centaur.

THE ARGUMENT.

"A horse! a horse!! a kingdom for a horse"!!!

In this, as in many other sentences of the great dramatist, there is more philosophy than at first meets the eye. No doubt if Richard when the tide of battle turned against him at Bosworth Field, could have procured such a steed as that which carried the renowned Dick Turpin to York, he might, like Turpin, have effected his flight to that city, and there, as he was highly esteemed, he might not only have escaped from his adversary; but have raised such an army among his northern retainers, by whom he was sincerely beloved, as would have turned the tide of war in his favour; but for want of a horse he was overtaken and slain. No doubt the Egyptians, who were the first to use the horse for military purposes, won many of their tributary kingdoms by means of their cavalry. The success of the Spaniards in Peru was in no small degree owing to their cavalry, as the natives, who thought the horse and his rider were one animal,* became alarmed, and fled at the very sight of the cavalry. It is therefore, no exaggeration to say that kingdoms have been won and lost by means of the horse. King Robert Bruce, through a little strategy and the fleetness of his horse, escaped the machinations of the traitor Comyn, and saved his life, and afterwards won the crown and kingdom of Scotland. A friend of Bruce's—who was residing at the Court of Edward, King of England—ascertained that a plot had been concocted to murder Bruce in his castle at Lochmaben; and fearing to send any written

* Centaur.

communication, lest it should be intercepted, forwarded to Bruce a pair of spurs and a purse of gold. Bruce knew that the spurs meant flight, and the purse, means for his journey ; but the ground was covered with snow, and if he were to fly, the conspirators could easily trace him. He however got the blacksmith to invert his horse's shoes, so that by the prints of the horse's feet upon the snow, it appeared Bruce had returned to his castle instead of having just left it. The *ruse* succeeded admirably, and Bruce escaped to Dumfries—a town about 8 miles from his castle—where he met the chief conspirator and slew him. At the Battle of Bannockburn, Bruce's horse rendered him valuable service in several of the hand-to-hand encounters in which he was on that day engaged. Many instances are on record of monarchs and others being saved through the swiftness, courage, or ingenuity of the horse. Thus we are told, 1st Book of Kings, 20th chapter, and 20th verse—That "every one slew his man, and the Syrians fled, and Israel pursued them, and Ben-hadad, the King of Syria, escaped on an horse."

The horse has, from the time of the Egyptians to the present day, been intimately associated with man in all his undertakings; a work, therefore which will treat of "The Horse and its immediate surroundings" cannot fail to be both interesting and useful, and such the author trusts his work will prove.

ADDRESS

TO

SIR CHAS. FORSTER, BART., M.P.

My Dear Sir,

Walsall, your native town, being the great emporium of Saddlery, where that, and the kindred trade of Harness manufacturing, are carried on in all their various departments, and everything used in connection with the Horse, either for civil or military purposes, is produced in the highest state of perfection; and you having for upwards of a quarter of a century been the faithful representative of Walsall in Parliament, I know of no one to whom this work could be more appropriately dedicated, or one so deserving as yourself of this humble tribute of respect.

The work, which aims at being a thoroughly practical treatise on the Horse and its Rider, will be found to contain such instructions as will, if strictly carried out, enable those entrusted with the care of that most useful and faithful companion of man—the Horse—to secure its comfort, preserve its health, and prolong its usefulness. Information will also be found in this work which will enable parties requiring horses for business or pleasure to select those best suited to the purpose for which they are intended.

Such a work may therefore be looked upon as an effort to introduce a more rational and humane system of treatment for that noble animal, and knowing that your sympathies are sincerely with all movements having for their object the amelioration of the condition of the human subject, or that of the lower animals, I sincerely hope this humble effort to secure better care for the horse, more comfort and safety for those in charge, and greater satisfaction to the owner, may meet with your approval.

Your humble and obedient Servant,

EDWARD W. GOUGH,

M.R.S.P.C.A.

May 1st, 1878.

RESPECTFULLY DEDICATED

TO

SIR CHARLES FORSTER, BART., M.P.,

BY

THE AUTHOR.

Cloudland.

ILLUSTRATIONS.

THE AUTHOR.

MUTUAL FEELING.

THE CENTAUR.

CLOUDLAND.

APPROACH TO THE AUTHOR'S STUDIO. (Park Hall House.)

THE AUTHOR'S STUDIO. (Park Hall House.)

SCREW LOOSE.

ANATOMY OF THE HORSE.

FEAR AND SURPRISE.

EASE AND COMFORT.

PLEASURE AND ACTION.

THE AUTHOR'S CENTAUR.

BITS, &c.

TEETH AND FEET.

THE MILITARY SEAT.

ARTICLES.

Lines on the Centaur.

The Argument.

Address.

Introduction.

Preliminary Remarks.

The "Thorough Groom."

Selecting the Horse.

Classification of Horses.

Standard Measure and Principal Points of the Horse.

Rule for Judging the Age of the Horse.

Purchasing or Ordering the Harness.

Fitting the Harness.

To Attach the Horse to the Vehicle.

Driving.

Memos. not to be forgotten in connection with the Harness.

Unharnessing.

The Vehicle.

Jibbing.

Riding; Spurs.

The Stable and Stable Fittings.

Docking and Nicking.

Cart, Farm, and Pit Gears; Shoeing and Roughing.

Effect of Music upon the Horse.

Natural Cleanliness of the Horse.

Wonderful Horses.

Wild Horses.

Horsey Phrases, Slang Terms, and Racy Remarks.

Horse Shows, and May Day Celebrations.

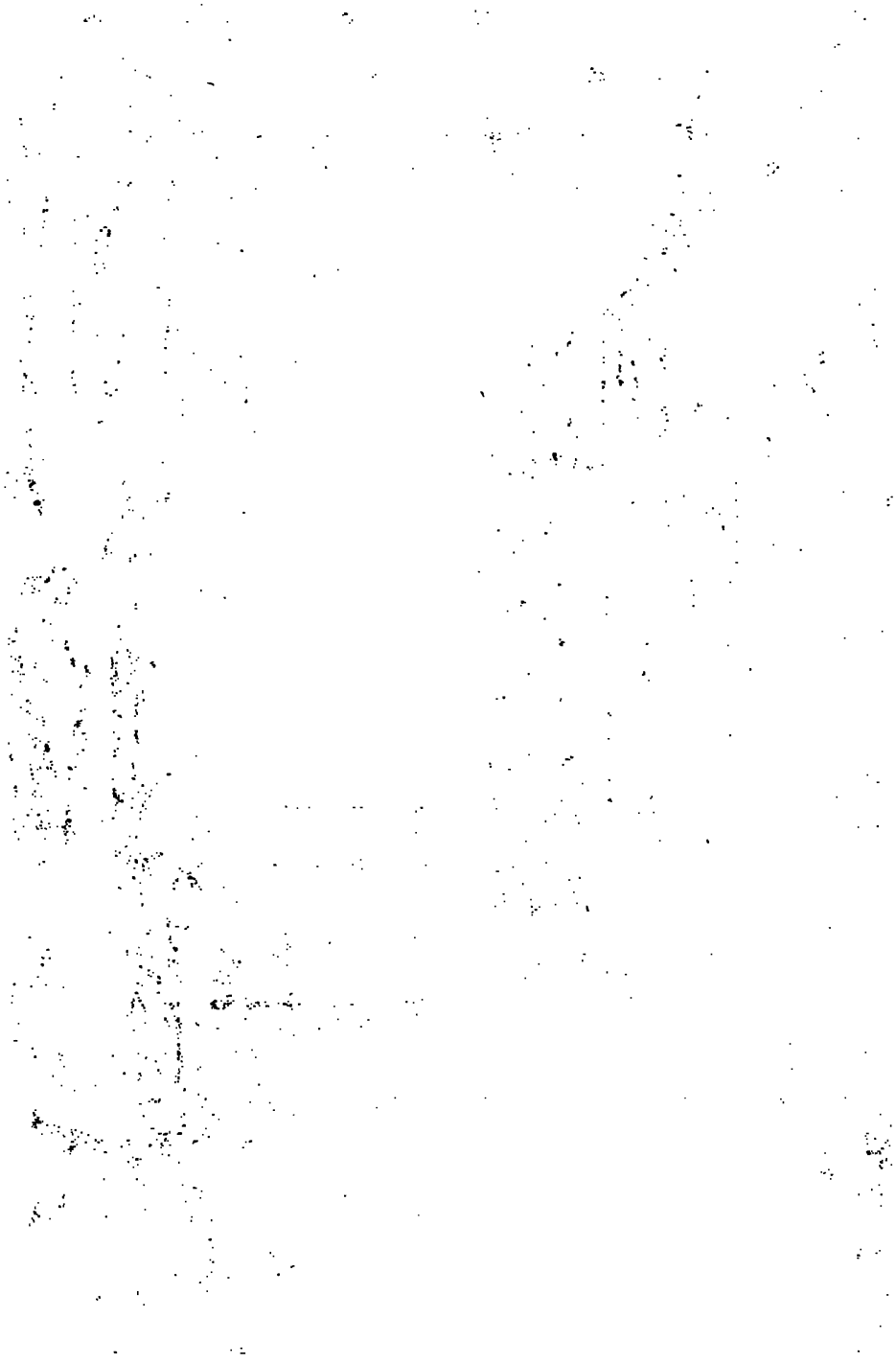
The Free Registry System.

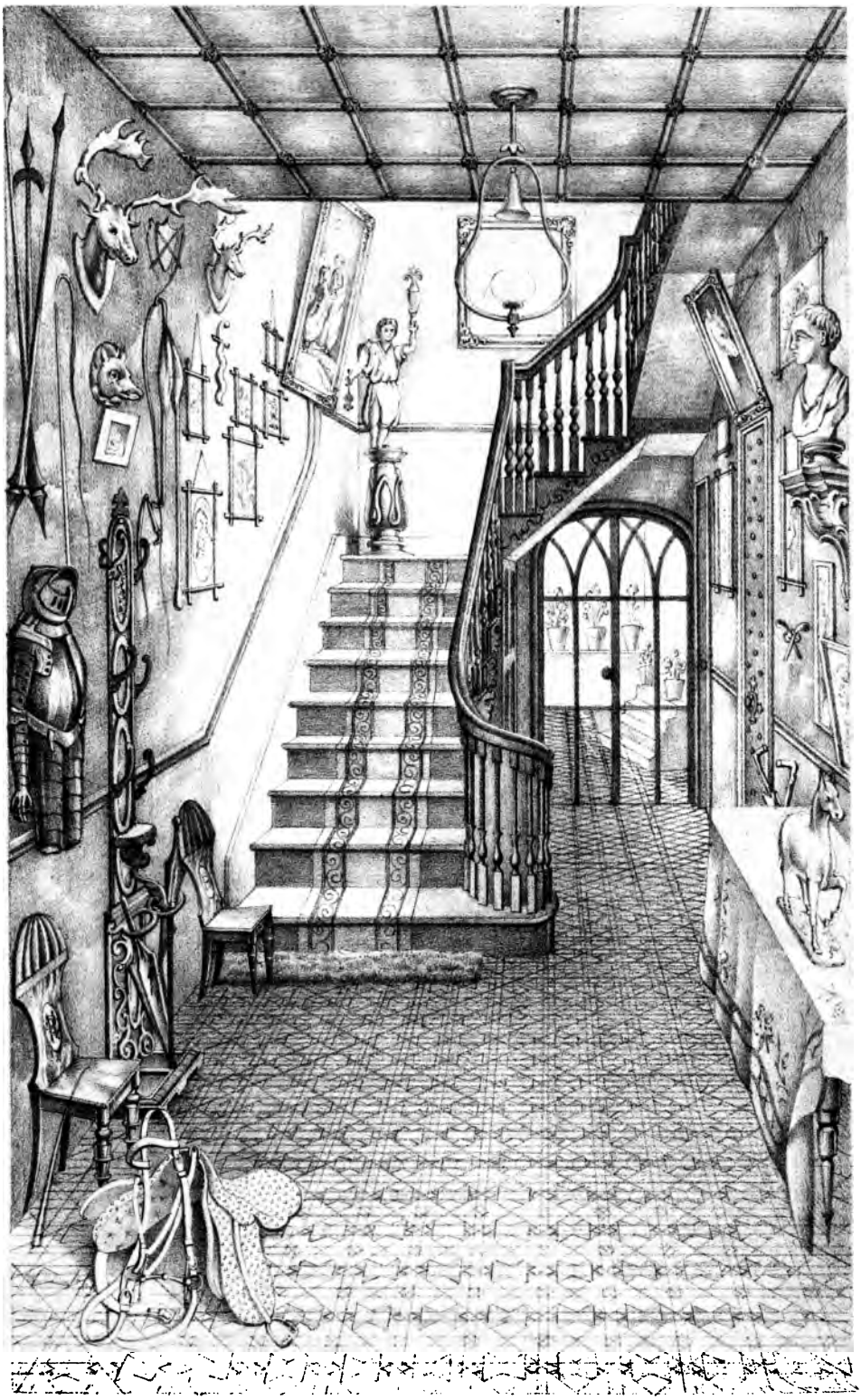
Saddlers' Shops.

Hints and Receipts.

Varieties of the Horse.

Conclusion.





Approach to the Author's Studio

(PARK - HALL - HOUSE.)

The Author's Studio

INTRODUCTION.

"To advise and not dictate."

In obedience to the urgent wishes of my numerous patrons and friends, I have the pleasure of submitting, in Book Form, that system of treatment relative to the care of the Horse and its belongings—which I have throughout my life's experience and engagements, (at home and abroad,) in connection with my business always practised and upheld; and which system, when given verbally, has met with such general appreciation.

Dating, as I have the honour to do, from a most important midland town, indeed I may say the very seat of the harness trade and every article connected with my subject, it will not I trust be considered egotistical if I pride myself in being the proprietor and founder of the principal General Saddlery Manufactory in that town, and venture to put before my readers a "*Great Want,*" in the shape of advices and suggestions to those about to *set up* a "Turn out," which, may be applied to useful account in many cases by those already in possession of that necessity or luxury as the case may be.

The author's belief is, that the contents of this book will be appreciated by all interested in the Horse, emanating as they do, from one who is, and has been from his youth,

directly connected with the subject in hand, and whose sole object is, and whose wish and ambition has always been, to alleviate the risks and labours of the horse owners, and the too frequent administration of unnecessary punishment to the noblest of animals, and man's universal favourite.

At the same time the writer is fully conscious of the fact that the ground has been frequently trodden before, but he has never found the *one real want*, namely, a little less Theoretical, and a little more Practical writing upon this very important subject.*

In the work undertaken I shall endeavour to place before my readers, ideas and experiences, in "plain, simple, and unvarnished language," being fully confident of the good-will and indulgence which will be shown towards me in this my first "*Turn Out.*"

I am,

Your obedient Servant,

E. W. GOUGH, M.R.S.P.C.A.

PARK HALL HOUSE,
WALSALL, 1878.

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* It is said that the practical man cannot be a literary man. Should this apply somewhat to the present publication, the Author will rejoice, providing his aim is attained, namely, more thoughtful care for, and less inattention to, the Horse and its surroundings.

PRELIMINARY REMARKS.

"Knowledge is the wing, &c."

In this pushing and go-a-head age the ambition to possess a "turn out" is very great, and, when attained, the frequent crying evil is want of system and method, and more particularly, kindness and patience in the care and treatment of the principal comprising it, namely, the Horse. A thorough knowledge of that noble animal's real use will prevent it from being abused, as it very often is, and tend to gain its confidence and obedience.

It is a well-known and acknowledged fact amongst experienced owners, stud grooms, and coachmen generally, that a quicker and more marked improvement is made in the condition and general health and temper of the Horse, and more work can be got out of it with kindly and judicious treatment, than by carelessness and bustling.

Corn without consideration is nothing, and it is a grievous truth that many whose business commands the constant use of the Horse, and have, more or less, from their early days been in possession of one, are generally more careless, and exhibit greater ignorance, than others whose experience is more limited; and, it is often found that great want of thought and persistence is shewn by

some proprietors towards those whom they employ, and whose duty it is to care for the steeds—intrusting them sometimes to totally inexperienced persons, not only in the stable and the field, but in the public thoroughfare, thus endangering the lives of the horse and driver, and the public generally.

If owners, however small the stud, would be more careful and strict, or systematic, in seeing for themselves that their "turn out" is not neglected or abused, and if drivers would exercise more patience, adapting themselves steadily to circumstances, and displaying less disposition to flourish, particularly in towns and crowded thoroughfares, with restive animals, the general risks would be greatly if not altogether diminished, and less work would be found for the police and members of the Royal Society for the Prevention of Cruelty to Animals.* Experience frequently tells us that the Horse is often illtreated, illcared for, and abused, when kindness, moderate attention, and thoughtful consideration should be given. The whip is introduced where a kind word or gentle pat on the neck would be effective; a curse is used where the simple mention of the horse's name would be sufficient; filth and dirt are allowed to accumulate where cleanliness is absolutely necessary; ventilation is grossly neglected; bad grooming, irregular feeding, impure water, and many other things from which the Horse suffers are

* The Author is a Member of the Royal Society for the Prevention of Cruelty to Animals.

the result of carelessness and want of thought, as a rule, but in some instances they are wilfully practised.

With respect to the harness and vehicle, they are repeatedly neglected, and allowed to suffer from dirt, want of oil and regular cleaning, entailing expense and dissatisfaction which might be avoided.

In this little work the writer does not purpose giving an elaborate display of high flowing terms, but will simply adhere to plain language—not intended for owners of large establishments,—although a few useful hints may be gathered to advantage. Neither would he encroach upon the sphere of the "vet.," farrier, or breaker, knowing at the same time that they would understand the real purport and meaning of his remarks, in putting before those immediately concerned, in plain English, without the least effort at embellishment, but in a few condensed articles explain the simple system that should be laid down by all owners, whether they set up a temporary or permanent turn out. The author's experiences are those of a life time, both at home and in foreign countries—under ground and upon the surface—and he feels fully confident that any suggestions he may be able to give for the general good will be looked upon in the usual appreciative light, and every indulgence given for oversights or technical errors that may arise, whether it be on the part of the author, or otherwise.

FORWARD

THE "THOROUGH GROOM."

"Achievement is command."

The "Thorough Groom" is the man that takes a pride in his charge, and that alone is the test, whether it be the paid servant or the owner of the horse; for it is equally important that the master should do his duty, when he undertakes it, as the man. The business of horse-keeping must not be skimmed over by the employer or employees. Care must be taken not to be prompted to adopt *all* the complicated and expensive experiments that are frequently suggested, and which in many cases do not mean economy or improvement, but anxiety, and reduction in the market value of the horse.

Is it not a real pleasure to see the very easy and systematic manner in which the thoughtful and cheerful groom goes about his work, and the perfect understanding that exists between man and horse? Mutual feeling is brought about by nothing else but regular habits on the part of the groom—doing everything in the right way and at the proper time—no noise, no irritation, but constant rule and steady firmness makes the obedient and thriving horse.

If the inexperienced owner cannot or does not care to avail himself of the services of a thoroughly practical groom, he should pay an occasional visit to some of the good studs in his locality, where he will always find an example, and frequently advice will be given which will tend greatly to aid him in the amateur regulations of his own stable, and make that which has previously been a toil, a healthy pleasure.

The writer's business engagements frequently call him into the mines, and it is always a very pleasurable sight to see the wonderful control exercised over the strong, well-corned animals there to be found from year's end to year's end, and which so seldom see day-light that they become restive at the appearance of strangers. The amount of work these horses are capable of doing, and the condition in which they are invariably kept, is a striking example to many above ground, especially when it is considered that they are principally controlled by mere lads. Of course there are properly qualified persons appointed to superintend the horses, and look after their health, &c., and, it must be admitted that their general appearance reflects great credit upon those concerned, and speaks volumes in favour of the systems adopted underground.

The Stables in connection with the Cannock Chase Colliery Company's Mines, and many others in that district, would surprise most persons accustomed to horses and stable routine on the surface. Down the one mine alone the writer has seen as many as 150 horses—all fat and happy—seemingly far more contented than many to be seen in our streets, which alone is the result of the excellent rules laid down by the managers, and adhered to by the horse-keepers. Everything calculated to contribute to the comfort and safety, or in other words, for the welfare of all concerned below is well considered, special attention is given to gas lighting, whitewashing, and ventilation.

The dray horses of the Midland Railway Company are particularly noticeable for their cleanliness and good condition. Regular attention appears to be paid to the harness—it being always kept thoroughly sound. The contented manner in which the horses stand in the public streets (in all weathers), for loading and unloading, and

without winkers* in the bridles; and the frequent conversation and even caresses that at times may be seen passing between man and horse, is a pleasing and instructive example to the generality of carters.

A good system is adopted by Messrs. Allsopp & Sons, the eminent brewers of Burton-on-Trent, towards their horses, which, like others belonging to several noted firms in that locality, and in Liverpool, that might be mentioned, afford ample proof of what horses can be made to learn and do with proper treatment.

The "thorough groom" should by all means be a punctual early riser, and strive by cleanliness, straightforwardness, smartness, and truthfulness, to gain and maintain the confidence of his employer; and by kindness and steady firmness he will easily obtain control over, and continued obedience from, the animal under his care.

It is a well known fact that comparatively young horses have been reduced nearly to the decrepitude of old age by the barbarous treatment and ill-care of those who are considered and looked upon as their zealous protectors.

How often have we seen (and do we see) the overloaded animals staggering and struggling along, to all appearance more dead than alive; with limbs bowed, the feet neglected, battered, and distorted; its under lip fallen; the cavity above the eye deepened, and numerous other signs of premature decay which are brought on by abuse and negligence alone, and all of which can be, and are warded off by the care, kindness, and genuine attention of the "thorough groom."

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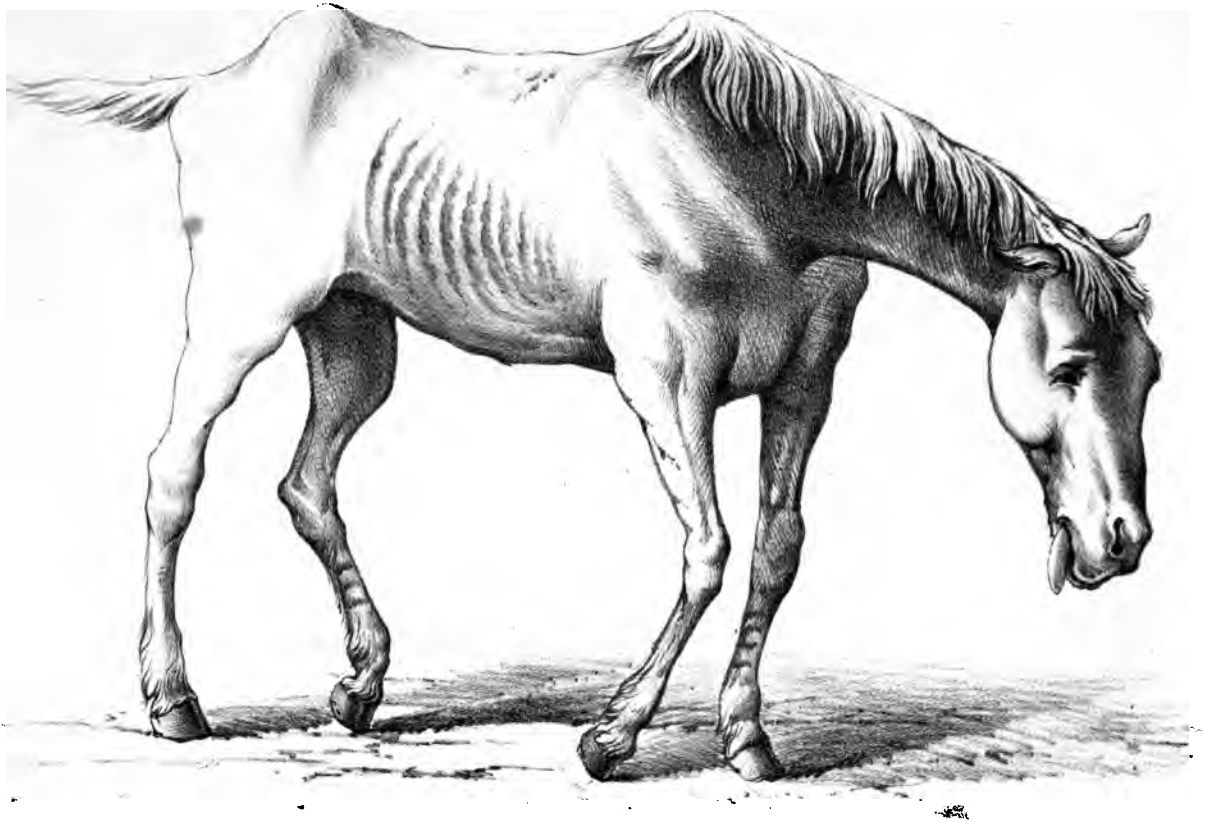
* In some parts they are called blinkers.



A Screw Loose.
The result of Bad Treatment

SELECTING THE HORSE.

"Let your wisdom be your guide."

In choosing your steed it is as well to remember the genuine old saying—that a good horse is never a bad colour—but in setting up the first "Turn Out" there are often many difficulties to surmount in this respect, it being the wish or desire on the part of the purchaser, or those of his family or friends whom he may consult, that the horse *shall* be some particular colour; and the height, age, make, and price is carefully laid down; in fact the undertaking is gone into with such apparent nicety, and made of so serious a moment that these complications are ultimately determined upon, and thereby it almost becomes an absolute necessity that the speculator shall be *measured* for his wants, e're he can be (to use the old trade term) carefully or successfully fitted. Newspapers are frequently looked over with the object of meeting with some advertisement of an animal calculated to answer the exact purpose, and after considerable searching, a horse is found that will probably suit in every respect, and a journey is made for the special purpose of purchasing. On arriving at the address given, it is invariably discovered that an omission has been made in the notice, viz., that the horse has been *down;* or, is *aged;* perhaps too young; a mere baby—and like a cub bear—has all its troubles before it; or, has once run away; is a kicker; crib biter; not quiet in harness, or with children; is given to shying; requires a lot of whip, or is vicious tempered; in fact, the probability of numerous faults or shortcomings are likely to be found, unless the would-be purchaser has had some previous cor-

respondence with the advertiser before waiting upon him. The excuse, then, to get out of the business is invariably the price, or some sort of unsatisfactory termination is invented on one side or the other for the purpose of closing the matter, which having incurred expense and loss of time, means double preliminary cost. The writer's advice is, should the purchaser be inexperienced in horses, prejudice as to colour, and other little trivialities must be altogether abandoned; and if on confidential enquiries having been made, the desired speciality cannot be found or heard of among one's friends, a respectable, well-known, old established horse dealer should be consulted, who will soon learn your wants (and the wishes of your friends, if such are interested), and prompt satisfaction will thus be ensured, and the special benefit of the option of exchanging the horse after reasonable time has elapsed, thus saving considerable anxiety, besides risk and responsibility.

If a friend supplies the animal, the offer of a trial should by all means be taken immediate advantage of—the ribbons being handled by the purchaser (if he can drive) in the presence of the seller. Back money, and other horsey phrases should never be mentioned in commencing the deal.

Special care must be taken by the inexperienced in buying at *Fairs or Public Markets.* The saying must be remembered that—"They can see you coming." A queer sort of gentry are known to exist by being on the "look out," and are never to be found after the bargain is concluded. *Money makes the mare to go*, but it is often the case in spending money too conspicuously, that the only *goer* in the business is the *seller*; and the rule is for the inexperienced horse buyer never to visit an auction alone, which advice the writer has heard from the lips of an old standing conscientious auctioneer.

Under any circumstances if the horse is required for immediate work do not buy a young one; and it must be remembered that if the animal must grow into money, it is absolutely necessary to keep clear of an aged one. If the horse has once been down, or fallen upon its knees whilst being driven, it is very likely to come down again; and the same rule applies to its running away, or what is commonly known as bolting. Shying is not a very serious matter in the hands of an experienced whip. In any case, if the purchase be an high priced one, a veterinary inspection is necessary, and a warranty, the general rule.

Should the seller shew an extreme anxiety to hurry the sale, or display the slightest irritability or impatience at the purchaser's enquiries, examinations, &c., the business with him is better concluded at once, and the horse left in his possession; forcing the sale, by the aid of displays of temper and sometimes insult, is an evident sign that "all is not right above board." In selecting your horse, the first consideration should be the class or character of work intended for it to do; the size, make and proportion of the horse should be at all times in exact harmony with the weight expected to be moved with ease. As regards the colour, dark horses are mostly preferred; light coloured horses are generally, it is said, more weak and nervous tempered; mares are not, as a rule, selected or chosen on account of their being at times of uncertain disposition, but the writer has no choice in that particular respect, having as much affection for, and confidence in, the mare as the horse.

Piebald or skuebald horses are not in much demand excepting for public exhibitions, &c., because of their conspicuous colour.

It is at all times advisable, particularly if the purchase be an high priced one, to hand the steed over to a breaker for the first drive or so, as may be deemed necessary, which precaution alone will be calculated to save a multitude of after discoveries, risks, and inconveniences, and give confidence to the speculator, and a better appreciation of the value. At the same time it will not be considered out of place for all concerned to endeavour to endorse the Shakesperian line, viz :—

"Truth loves open dealing."

CLASSIFICATION OF HORSES.

"A Horse! A horse!! My kingdom for a horse."

THE COLT.—The male under 3 years old.

THE FILLY.—The female under 3 years old.

THE SHETLAND PONY.—Is the smallest, and comes from the highlands of Scotland.

THE WELSH PONY.—Larger than the Shetland.

THE NORWEGIAN PONY.—Larger than the Welsh Pony, and commands heavier prices, being very handsome and docile.

THE PONY.—Is less than thirteen hands.

THE GALLOWAY.—Is about thirteen hands, and named after Galloway, in Scotland.

THE COB.—Is stoutly built, between the horse and the pony.

THE HACKNEY.—Is about fifteen hands, useful for almost every purpose, the hunting field, the farm, and private turn out—in fact, is the farmer's servant of all work.

THE DRAUGHT HORSE, OR CART HORSE.—Averages sixteen hands.

THE DRAY HORSE.—Is the heaviest and most ponderous of his race, being intended for slow heavy work; —weight is the principal feature in the breeding of these useful animals. Lastly—

THE BLOOD HORSE, OR THOROUGH BRED.—Of which nothing need be said, more than it is perfection, and as beautiful as a picture.

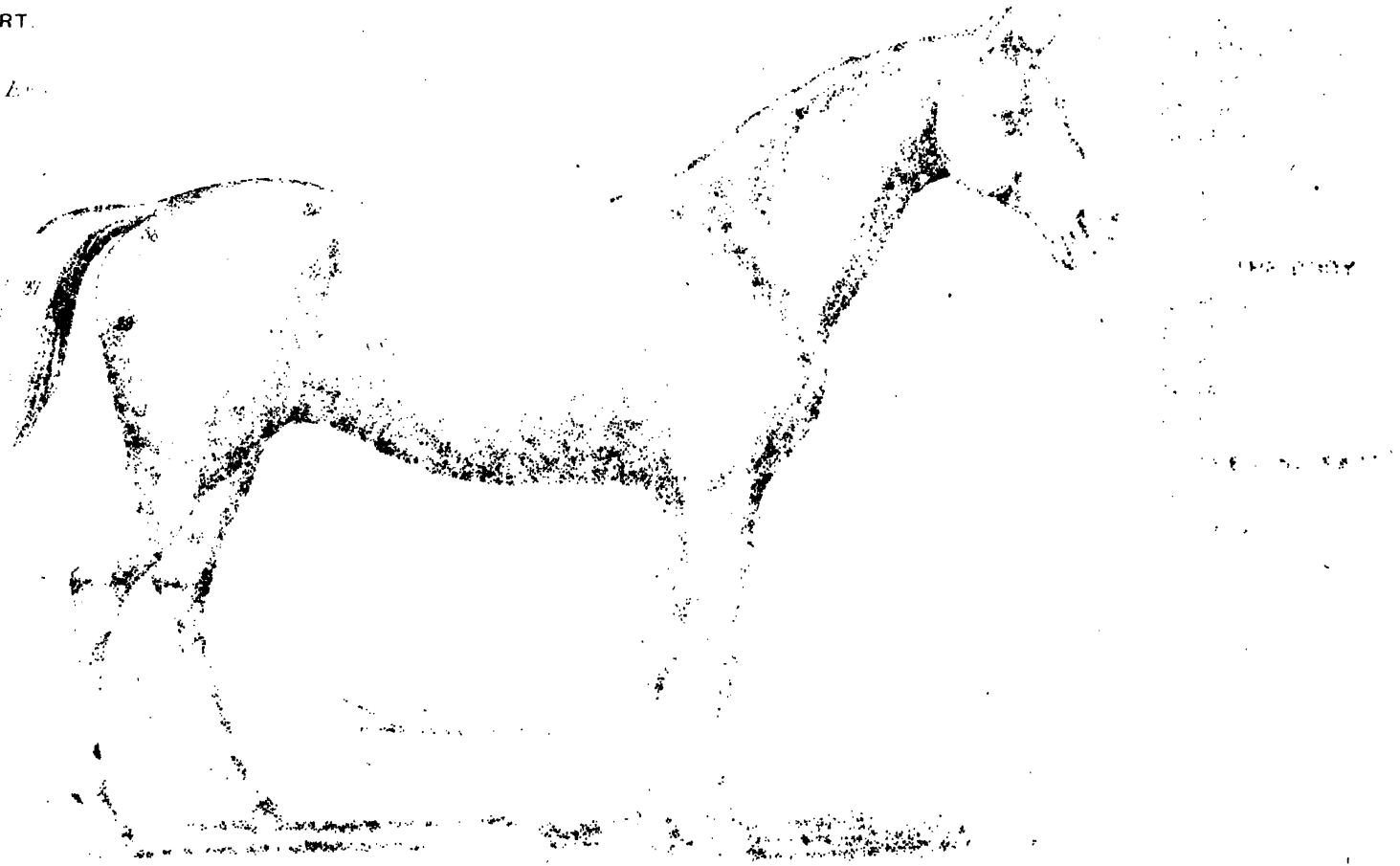
"Pleasure and action make the hours seem short."

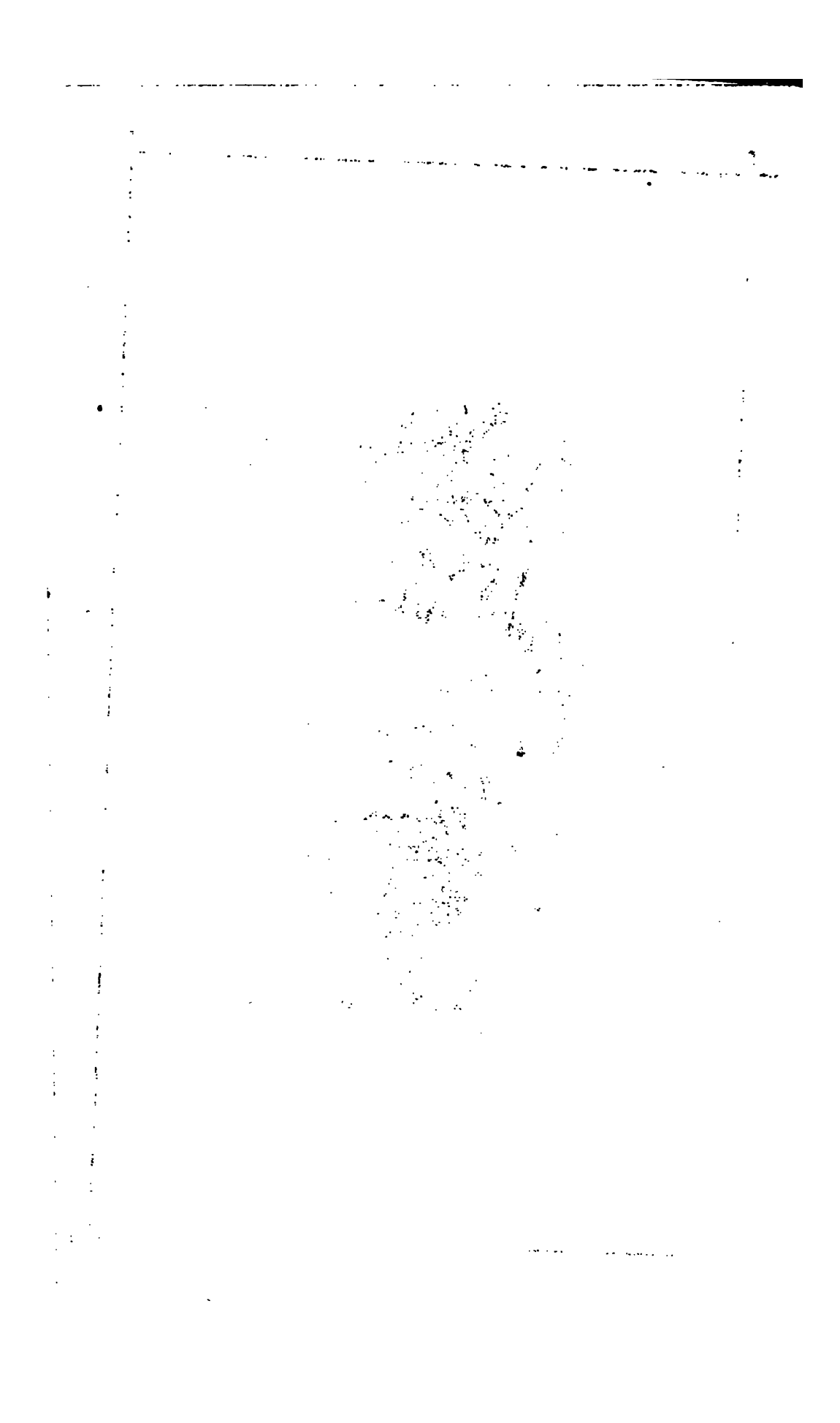
ANCIENT WALSALL.

The above Engraving is taken from an old sketch, drawn from memory by an Artist after visiting Walsall Races.

THE FORE PART.

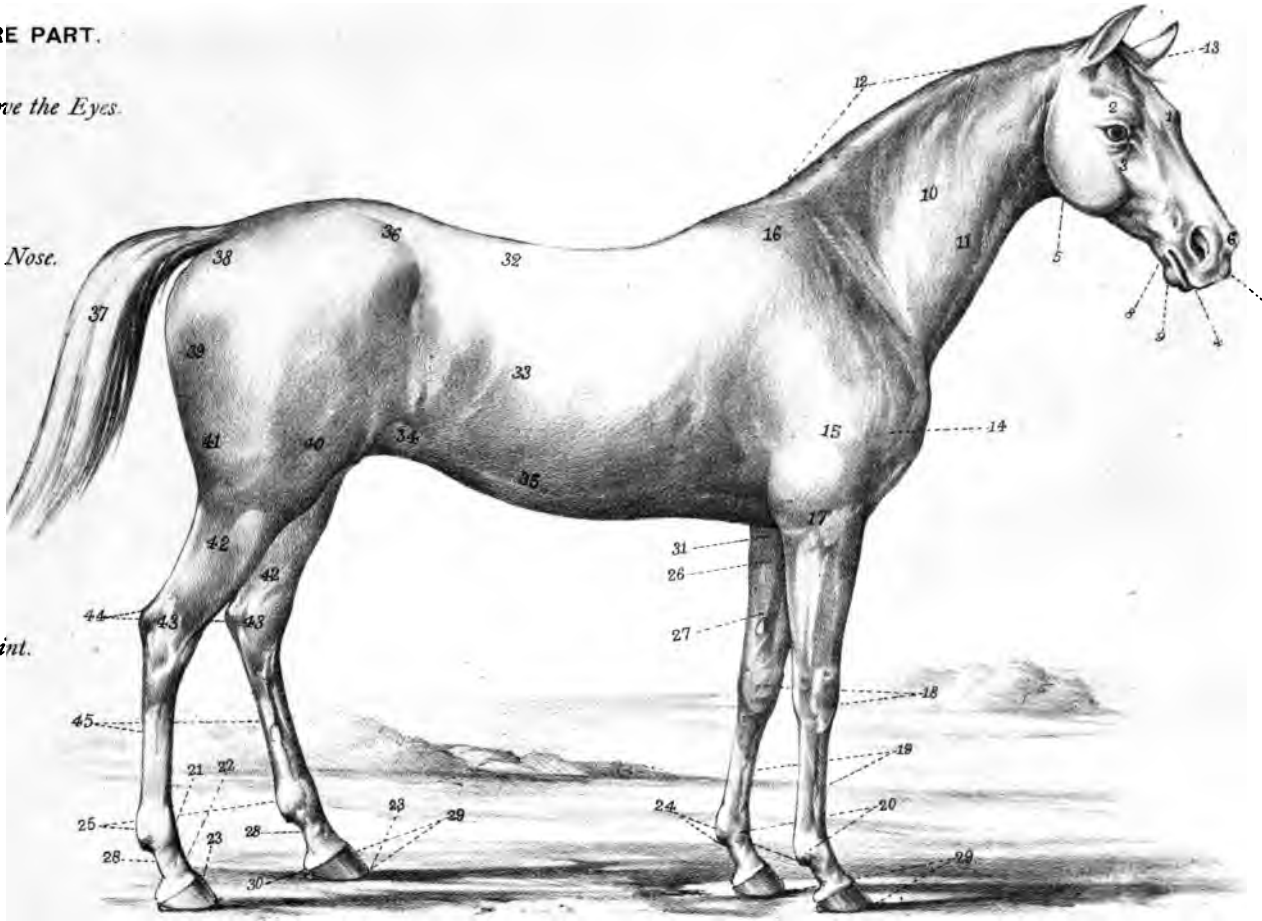
1 *Forehead.*
2 *Cavity above the E[illegible]*
3 *Temples.*
4 *Lips.*
5 *Face.*
6 *Nostrils.*
7 *Tip of the Nose.*
8 *Beard.*
9 *Chin.*
10 *Neck*
11 *Throat.*
12 *Mane.*
13 *Fore Top*
14 [illegible]
15 *Shoulder.*
16 *Withers.*
17 *Arm.*
18 *Knee*
19 *Shank*
20 *Fetlock*
21 *Pastern*
22 [illegible]
23 *Hoof*
24 [illegible]





THE FORE PART.

1 *Forehead.*
2 *Cavity above the Eyes.*
3 *Temples.*
4 *Lips.*
5 *Jaw.*
6 *Nostrils.*
7 *Tip of the Nose.*
8 *Beard.*
9 *Chin.*
10 *Neck.*
11 *Throat.*
12 *Mane.*
13 *Fore Top.*
14 *Chest.*
15 *Shoulders.*
16 *Withers.*
17 *Arm.*
18 *Knee.*
19 *Shank.*
20 *Fetlock Joint.*
21 *Pastern.*
22 *Coronet.*
23 *Hoof.*
24 *Fetlock.*



25 { *Back Sinews or Main Tendons.*
26 *Plate Vein.*
27 *Chesnut.*
28 *Quarters.*
29 *Toe.*
30 *Heel.*
31 *Elbow.*

THE BODY.

32 *Reins.*
33 *Ribs.*
34 *Flanks.*
35 *Belly.*
36 *Fillets.*

THE HIND PART.

37 *Tail.*
38 *Rump.*
39 *Buttocks.*
40 *Stiffle.*
41 *Haunches.*
42 *Thighs.*
43 *Hock.*
44 *Point of the Hock.*
45 *Instep.*

Anatomy of the Horse.

STANDARD MEASURE, AND PRINCIPAL POINTS OF THE HORSE.

A "Hand" is 4in. from the sole of the foot to the top of the withers, by which standard all horses are measured.

The principal points of the horse are :—

The Chest,
The Back,
The Shoulder,
The Arm,
The Knee,
The Teeth,
The Foot,
The Eye.

RULE FOR JUDGING THE AGE OF THE HORSE.

"Corruption wins not more than Honesty."

To form something like a correct idea of the age of the horse, and at the same time to test the veracity of the salesman, it is usual to first ask the question—How old is it? then to look for yourself, not only at the mouth, but the eyes, and the legs, and in fact, to carefully scrutinize and examine the animal all over; at the same time asking the owner a few questions as to its health, habits, capabilities, &c. Many an aged horse has been doctored, or to use the term, "faqued up," and palmed off upon the unwary or over-anxious buyer, who has set his mind upon that particular steed, for a younger one; and it is not unusual for a young horse, shewing a good mouth, to prove dull, heavy, and sluggish, after a little regular work, and to wear a languid and listless aspect, which results in frequent overdoses of the whip, freely and constantly administered to the poor animal that has been worked too early in life, neglected and badly cared for both in the stable and out of doors. It is an easy matter in purchasing a useful aged horse, to determine whether it has been over-worked or systematically physic'd. Some owners do not consider a horse equal to a fair day's work until it is five years old, and that it does not gain its full power of strength until it arrives at seven;—and the universal system is, never, under any circumstances to give a young horse a full load.

The simple rule for telling the age is by examining the teeth. There are six permanent nippers or front

teeth in the lower jaw; the two front teeth are understood to be cut at ages varying from two to three years, and the teeth each side the middle ones from three and a half to four years. Between four and a half and five years introduces the corner pair and the male tusks. The horse is known as aged at eight, when the marks in the corner nippers are effaced. They are worn out at six in the two centre teeth, and at seven in the next pair.

Horses have been known to live for thirty and forty years, but, from over-exertion and ill-usage frequently die, or are slaughtered, before they reach ten.

PURCHASING OR ORDERING THE HARNESS.

"Knavery's plain face is never seen till used."

The first question to consider in reference to the harness before you purchase or order is, the kind of vehicle to be used, if a heavy or light one, or whether it is to be a gig, dog cart, or four-wheeler. For a gig the harness should be made up to have a light appearance—an imperial pad with straight flaps, square furniture, and winkers looks and wears well, in both silver and brass furniture. Where practicable the horse may be used without winkers. If the business requires a dog-cart or trap, the harness should be somewhat heavier, with an Alexandra or other saddle, at discretion. Should a four-wheeler or phaeton be decided upon, the saddle is not required to be heavy, the only weight to carry being the shafts, but a breech-band, (either a long or short one), is absolutely necessary. Many persons in setting up their first "Turn Out" decide upon having a second-hand set of harness, which system of *drawing the line at the harness*, after going to the expense of a good horse and new vehicle, requires second consideration, and the harness, before purchasing, a most minute examination. At first sight it may be clean, and to all appearance sound; but when we consider the fact that the simple breaking of the top hame strap, or the ends of the traces, or billetts of the reins, may result in the death of a valuable steed, the total wreck of a handsome vehicle, or perhaps, permanent injury to the driver and occupants, besides numerous public risks, it is absolutely necessary that the

harness should have as much, if not more, consideration than the remainder or most expensive part of the "Turn Out," particularly as we are aware of the fact that the welfare of the whole lot depends entirely upon the soundness of the merest strap, which it is an easy matter to overlook in purchasing a second-hand, or cheap, common-made new set.

The writer's interestedness in his business has caused him to be many times amused and surprised while reading the very tempting baits advertised in the daily papers, emanating from persons whose original trade or profession has nothing whatever to do with the article they profess to laud up; and whose clever endeavour it is to force upon the public common goods, totally disregarding the business man's pride in legitimate trading. Here is an advertisement, emanating from a large manufacturing town, which the writer read four days in succession, and ultimately followed up to the end:—"Extraordinary bargains—50 Sets of Silver Harness, Complete—all sizes—best quality—to be sold cheap—No reasonable offer refused as the lot must be cleared out immediately, the manufacturer wanting money."

The writer went by the first train, on reading the above, to prove the genuineness of the number of sets advertised, having an idea that the extraordinary bargain existed only in the fertile brain of the puffing shark (as these worse than Cheap Johns are called) who put forth the bait; and so it proved to be. On arriving at the shop, he was surprised to find nothing in the window or premises, as far as could be seen from the street, appertaining to harness; or that the proprietor had anything to do with, or knowledge of, the goods he professed to deal in so plentifully, and sell so cheap. Certainly, the entrance was plastered up with catalogues,

which seemed to have done good service, being much soiled, their details appearing to be manufactured for the express purpose of standing for a considerable time. The writer entered the establishment; then the business began between the principal and assistant, in certain side glances at the visitor, and undertones between themselves, (which is easily detected by the intruder;) their anxiety being to determine without delay whether they had secured a C. C. or O. T.—which means a "Caught Customer" or "One of the Trade," viz:—a harness manufacturer. Had they have decided him to be an O.T., then the visitor, by virtue of their suspicions of his superior knowledge of that special article, would have been told that all was cleared out about an hour ago by a firm in town; but thanks to the disguise assumed, the writer was ushered into—*the cellar or underground stock-room*—which seemed more like a lumber-hole—and the gas being turned on, to see—not fifty sets, but a hundred and fifty oddments, (not altogether confined to the Saddlery trade,)—including broken boxes, old and rusty hames, second-hand gears, cheap pilches and ladies' saddles, any amount of damaged cart collars, all smothered with dirt, and the first invitation was said in a light and happy tone;—"Buy the lot! Clear me out!!"—but on being asked for a view of the fifty sets, the expression of the man (whom, being the seller, we will call Mr. S.) was altered, and a more patronising and whining or whimpering voice was assumed, the excuse being that his assistant had made a mistake in advertising; the number should have been five instead of fifty, four of which he had just disposed of, at the same time opening a rough box which contained the only complete set upon the premises. On wishing or preferring to see it out of the box, the writer was told that if he had any knowledge of his requirements he could tell at a glance as the harness

lay, and save the trouble of unpacking. The fact is, the business of the seller is not to expose the miserable make and light and flimsy manner in which it has been specially put together for him. Such leather is known by the trade as "goose hide, or tripe." In reply to the query as to the furniture, the answer was Silver on German, meaning the one Buckle only—that the seller had just placed his finger upon—which was the Crupper Buckle and fixed there for that special and evasive purpose. The fact is, the furniture was iron, and in a very short time would have shewn quite black, as soon as the thin coating of silver had blown off. And it must be remembered that this man's dealings are never done in the presence of a third party. The price commenced at nine guineas, and in about four minutes came down to five pounds, without solicitation, such being the usual Cheap John system of saving time. On giving the horse's size as sixteen hands, the reply was that the harness would fit like a glove, and as true and easy as though it had been measured for, which augurs well for his judgment when he tells you the size of the collar belonging the set to be eighteen and half inches, and the fact is considered that the average length of collars for horses above fifteen hands is from twenty to twenty-one inches.

The harness is declined; then the visitor saw the "being" before him in his true colours, and was addressed in numerous insulting expressions, such as he did not mean business when he came;—if the money is not available he could be accommodated, either with *that or anything else*,—and the sooner he was off his premises the better. This being the way many unbusiness-like touts get their living; which makes it the more surprising when we consider the fact that the legitimate tradesman never insults his customers under any circumstances.

But the writer was not to be wiped out by the mean manner and contemptible language of the man so anxious to rid himself of his unprofitable visitor, and in retaliating, elevated a small black thorn walking stick, appearing to rub his nasal organ with the same, and addressed Mr. S. as follows :—

"Yes! Mr. 'Bad Leather Merchant', no doubt you are quite right in all you say; I may have some difficulty in finding the money for the purpose of encouraging your system of robbery, but, considering the fact that I have made a special journey here this morning, at cost and inconvenience, to see your extraordinary bargain of harness, with a view to purchase, it will not be in harmony with my regular way of doing business to return satisfied with the sight of one set and a job lot of rubbish, spiced with your low language; it is my purpose ere I leave this establishment to demand an immediate apology and all expenses incurred by your inducements."

Seeing the firm stand taken by his visitor, and thinking perhaps that discretion would prove better than exposure, the half-cowed man at once handed over the sum of one guinea, with a super-abundance of regrets and explanations.

But suppose, for the sake of argument, we say that we are duped by this harness seller, and bring the set home—with what result? to find the collar altogether too small. You write the same evening to the advertiser asking an exchange. Does he agree to it or offer to satisfy you in any way? Certainly not! that is no part of his business; the matter is done with as far as he is concerned and off his hands; the prevailing idea with him is to look out for another "mark." Your only remedy then is to order a collar from your saddler. It is made and fitted

satisfactorily, but alas! to find the hames far too small, in fact, they will not touch the proper sized collar, therefore your journey is again deferred with your new "Turn Out," and the result is—you order a complete set at the hands of the practical man, who is always willing to exchange any part of the harness within a reasonable time in case of misfit or alteration in the buyer's ideas or tastes, being fully aware of the trade rule—that in adapting a set of harness it is not only a matter of fitting the animal's back, but the eye of the purchaser.

And it must be remembered that the whole and sole business of the cheap advertiser is to sell at any price, totally regardless of risk to human life, or satisfaction to the customer, their entire plot seeming to endorse the old saying—

"My son, get money, honestly if you can, but,—get money."

FITTING THE HARNESS.

"How poor are they that have not patience."

In fixing the harness upon the horse it is necessary that all the parts comprising the set should be a close fit, but at the same time everything must be easy, or to use an old term—so that the hand can be placed between. The only item of the set that should be really pulled tight is the top hame strap, because the fit and form of the collar depends upon the exact manner in which the hames are attached and retained. In harnessing the horse the first part to commence with is the Saddle, and its immediate belongings. The crupper and breech-band should be placed (not thrown) carefully across the back, and left loose until the crupper dock is put in position, which is done by doubling the tail under, and keeping the same held up until the dock is fixed close, *without leaving any hairs between*, the whole of which is done by standing up near to the horse's side, with the operator's back towards its head, which will prevent the horse doing any injury; and the quicker and quieter this part of the business is performed the better, as the Americans say—"Hurry up! fix it clean, and right away."

THE CRUPPER-DOCK should always be a good substance, or thickness, and must not be made too hard, it is then considerably easier for the horse than a thin one, and will cause the tail to be carried more showily. There is some art on the part of the harness maker in properly shaping the dock; which is invariably stuffed with paper; but

linseed is preferable, being of an oily and softening nature, and permanent. Candles have been used, hence the term—"a candle dock." When the saddle is drawn up and placed properly upon the back, the attention should be directed to the pannel stuffing, the thickness of which is reduced after a few journeys in a new saddle; and it should never be allowed to come down thin enough for the tree to touch the horse in an old saddle. Occasional back-stuffing or examination at the hands of the manufacturer is advisable, particularly in worn saddles; and the wool should be renewed by taking out the old and knotty parts, caused by perspiration, or re-lined when necessary.

THE GIRTH should be buckled close but not tight, and the end of the girth strap run through the three loops in the girth body, which rule as regards the straps applies to sets of all kinds. Nothing looks more untidy than a lot of strapping ends hanging and flapping about, (to wit—the ends of the traces, if too long) besides being irritating to the horse. The belly-band, which is part of the back-band, should not be buckled until the vehicle is attached. The saddle must never be pressed too forward, because it naturally works in that direction. It is easily and nicely adjusted by loosing out or taking up the crupper strap.

THE COLLAR should now be put on the horse after turning his head from the manger towards the door. In new collars it is often necessary to open or widen them a little across the part that is to pass over the eyes, which should be done with the knee, and not by placing the collar upon a post, or hook—in fact, the writer has seen the handiest nail turned to account for that purpose, which not only scratches and damages the collar, too much pulling is calculated to put it out of shape, which, if once broken at the throat, will never recover its original firmness.

Before putting the collar on, it should be formally shewn to the horse, and a little conversation introduced, including the mention of the animal's name, and a few pats upon the neck, or (to use a military term)—to make "much of him," particularly if a young horse; which is done in less time than it takes to write it, and thereby does not mean losing time, but time saving. By such little attentions the help and assistance of the horse is being asked, (the result of which is very noticeable in well regulated stables,) and is never refused by a horse that has been properly appealed to. For putting the Collar on the neck, it is first turned upside down, with the wale or rim towards the fitter, and when it is close to the eyes of the horse it should never be *pushed up with a rush* or series of sudden jerks towards the ears, for under such circumstances it invariably happens that the head of the horse goes with the pressure and not against it, thus losing both power and time. The usual practice is that a gentle twist be brought to bear with both the hands each side the draught of the collar, and the housing pressed somewhat under towards the neck, and with the corresponding help of the horse, the collar is easily and quietly passed beyond the ears. It should then be immediately turned over into its proper position, (housing up) being reversed the way of the mane, and at once carried down to the shoulders.* The old-fashioned way of fixing the hames upon the collar while it is close to the ears at the top of the neck, and before it is reversed is very reprehensible, being tiring and irritating both to man and horse, and causes an extra amount of operating in front of the animal than is necessary, and likewise adds materially to the weight, encumbrance, and risk incurred in throwing the collar, hames, and traces round the animal's neck.

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* This of course will be understood to apply only to horses that do not necessitate an open topped collar.

Before putting the Hames on, it is important to know that they fit the collar exactly, in fact, the writer as a rule makes it a special point to have them fitted in form to the identical collar *by the hame maker,* thus preventing any fear of their slipping off in wear. That the hames should never move or spring from the position in which they are placed, is a matter of serious moment,—hence the importance of sound straps. The hames must not be too long or too short, in fact, make-shift, cannot compatible with safety, be applied to this portion of the harness under any circumstances. In nicely and promptly fixing the hames it is necessary to buckle them lightly to the collar for the time, during the process of running the hands round them to see that they are properly adjusted; after which the top strap is pulled up as close or tight as possible. The form of the collar should be carefully studied by the saddler, for each particular animal. It is a saying—that "Horses necks vary like Human faces,"—and it is well-known that the collar is the most important part of the whole harness, as regards comfort to the horse; whether it be used with Four-in-hand, Pair horse, Tandem, Gig, Dog-Cart, Phaeton, Trap, Buggy, Stage, Waggon, Dray, Cart, Pit, or Plough; and the whole of the before-mentioned and following remarks and comments, are applicable in either case. Some horses require a very narrow collar, which must be *made so,* and not *adapted*; some are wide at the bottom and straight at the top, others the reverse. Collars have been manufactured by the author, and are still in wear, absolutely odd-sided, and no other form would answer, (for the horse they were made) a single journey; but most collars more or less require to be full in the draught, and made perfectly true. Some horses, on account of their extreme width across the head, (or eyes) necessitate an open topped collar, which is never advisable when it can in any way be dispensed with, the

constant and wide opening in putting on and taking off causing the straw at the throat of the collar to break, and thus the firmness, (so necessary in the build of the collar) is lost, and oftimes the top-strap is left comparatively slack or loose by the fitter. The writer is in favor of a light top, a light throat, good draught body-side, and plenty of wool under the lining; and thinks the American collars perfection, and the harness and general teams a real luxury to sit behind; at the same time that class and make of harness would not suit the English roads for hard wear.

For the inexperienced to measure a horse for a collar, and to describe the want and form required, is a matter of no particular difficulty. If an old collar is at hand, that can easily be tried on to judge by, and a piece of stick, string, or tape cut to show the length. But the proper way to measure a horse's neck is with a 24-in. rule, from the near (or left) side, with the right finger along the end of the rule, and the left finger across the flat, to form a stop at top and bottom of the horse's neck; the left finger will shew the length required. The distance or measurement is taken from the throat or left hand end of the rule, which is pressed down close to the shoulder. If a piped collar is necessary, one inch extra should be allowed; and if a full or spare neck, or there is any peculiarity, instructions can be easily given. Should a little alteration, or even exchange, be desirable, after a reasonable trial, the prompt and accomodating manufacturer will not hesitate to do so.

It is the author's opinion that if piped collars were generally adopted, they could not, and would not be out of place.

Breast-Collars are never in much demand, and they are not as a rule considered any improvement to the

general appearance of the "Turn Out." The same argument applies to rush collars, but they possess the advantage of being handy, light, and non-chafing, and, if well fitted and properly leathered for the hame-draft, rein-ring, and top-strap, they will wear a long time, besides being readily (and with little cost and risk) cut, altered, or eased for sore necks, as circumstances may require. Some collars are made without housings, the side pieces of which are all in one—running right round the collar, and being as a rule manufactured of the best quality— have a very neat and light appearance. These are called broad topped or London collars. The stage and van collars are frequently used now of the same form and make, but of course considerably heavier, and answer the purpose equally as well as with the unsightly housing on the top. If a collar should be too large, a false collar, or shell, can be adapted, which, in case of sore necks, are very useful; they can be made either of solid leather, or double basil, stuffed with wool and quilted throughout.

THE BRIDLE is the most complicated of the whole harness, being no other than an ingenious, mechanical contrivance, or number of straps and bands put together for the purpose of carrying the bit safely and securely in the horse's mouth, and for no other purpose was it invented; therefore, in fixing the head-strap, front, throat-band, winker straps, (if any) and noseband, the *bit* must not be lost sight of.

In taking up or loosing out the *cheek-billetts*, the position, bearing, and action of the bit is materially altered, and the horse's temper considerably affected. The *throat-band* should never be buckled tight, but just as safety (in keeping the bridle in its proper position) demands. It is possible for the *front* to be a quarter of an inch too short, which oversight will cause the head-strap

to press against the ears, pulling them forward, and so allow the *winkers* to drop, adding considerably to the risk of the horse slipping the bridle, particularly if it be given to throwing its head about. Where winkers are used they should carry or hang exactly opposite the eyes, and if ornaments are worn, care should be taken that they be put on before the winkers are made or sewn in the cheeks. In fixing the crests, or monograms, after the bridle is made up, there is risk of the legs or wires sticking out and touching the eye from the winker lining.

THE BIT.—The best and safest for general purposes, and driving in particular, is the *guard bit*, it having no bar at the bottom cannot catch over gates or posts; and the best guard bit is the "revolving-mouth," being far preferable to the Liverpool, or slide mouth. The "revolving-mouth" cannot be held in the teeth against a jerk of the reins, in the event of the horse running away; and it is very easy and humane in its action, and extra leverage can be applied the instant it is required. The term has many times been used by horse owners in reference to the smooth revolving bar of this bit, that it will "mouth a colt;" at all events, its being perfectly loose affords plenty of occupation and amusement for restive horses while standing at doors in the street, their whole attention appears to be centred in playing with and manipulating the mouth-piece, which means safety and confidence, and ease of mind on the part of the occupants of the carriage or other vehicle, and the conscience of the driver is perfectly clear of the use of the brutal "high-port." The curb requires considerable judgment and feeling in its application. It should never be worn tight, and where applicable, as in the case of light-mouthed horses, may be abandoned altogether.

THE REINS are applied or fixed when the bridle and other parts are satisfactory, the billetts being run

through the near and off-side territts and hame dees, and attached to the bit. Several kinds and makes are introduced by manufacturers, viz:—*flat reins* with brown hand-parts and black buckle ends; *round reins*, brown leather all through; *flat brown reins; flat lined Oxford reins*, stitched two or four rows according to the quality of the harness, the latter looking very neat and wearing remarkably well, all of which are adapted to any class of harness; and last, but not least, is the important item which has caused so much controversy—

THE BEARING REIN.—Much has been said; volumes have been written; impossible pictures and numerous dear-at-any-price pamphlets published, in wholesale condemnation of the bearing rein, a specimen of which literature the writer once heard condemned by a justly-celebrated London steel goods manufacturer as "mere twaddle," and who said the contents were calculated to gain no other end or point than the one probably intended or hoped for,—to bring the objector before the public, and of giving him an opportunity of airing his *barbarous* sentiments, (this being the word chiefly used by persons of one idea only,) on that subject at least. The author does not condemn the use of the bearing rein altogether, neither does he advise or advocate the regular or permanent application of it, but his motto, in reference to that particular item of the set, has always been—Discretion, and his standpoint—Humane. That there are times and circumstances which demand to the harness the application of the bearing rein for the general safety of the "Turn Out" there can be no doubt or legitimate question raised. The fact is well-known that it should not be (and the author believes it is not) as a rule attached for appearance sake only, as some arguers would have it understood, or at the expense of punishing

the horse. A special case recently came under the writer's notice where the necessity for applying the bearing rein to a valuable 16 hands steed presented itself, and was ultimately adopted. The animal being fresh had taken to amuse itself, after a spin of a few miles, by throwing its head almost between its forelegs whilst going at a swinging trot, or, as some folks would term it, a rattling pace, and at times would vary the performance by the corresponding extreme—in the air, constantly pulling in a tremendous and excitable manner, thus shewing the necessity for both bearing rein and martingale, whilst the driver tried by all means in his power in calling the horse by name, coaxing, shouting, and touching him up with the whip, thereby causing a considerable amount of swerving, but all to no purpose. The risk of upsetting became more and more apparent, and would most certainly—and perhaps with fearful consequences—have come about, had the horse trodden upon a stone, or made a false step; at last the writer's suggestion was adopted, and some string was attached to act as a bearing rein, and carried from the back of the nose-band, through the bottom hame-strap to the belly-band. The result shewed itself in a few minutes (after first leading the horse, and then quietly mounting the vehicle) to the evident pleasure and comfort of all concerned; and the owner of the horse has said many times since that he has not, and never shall, go out with a spirited animal unless a bearing rein is either on the harness or ready for use in the vehicle. At the same time in fixing the "check" up to the hook of the saddle, care and judgment is necessary. The horse should have easy liberty in standing, and in going up hill, which can be regulated by the buckle on the near side; and it should be remembered that the bearing rein acts upon the crupper dock, and is not intended for compressing the animal's head to its tail. If the horse be a hard puller and

very fresh, the bearing rein will save considerable arm-aching on the part of the driver, and chafing on the part of the animal. Severity or brute force is not needed in any case, and at all times the end to be accomplished should not be sought for, or brought about, too hurriedly. The check-rein should always be slackened (if worn tight for the time) in going up hill, and if the opportunity occurs for taking the extra rein off altogether, it may be done; but it is little carriage, and, the writer would add—no ornament. The less harness and strappings a well-broken horse can with safety be made to do with, the better.

The writer cannot believe that the bearing rein is or ever has been wilfully converted into the instrument of torture, or made to administer one third the amount of punishment that its hidden substitute—the "Gag Bit," (see illustration,) has done; the working of which can be seen at a glance. And the imaginary charges and ridiculous illustrations that have been published against the bearing rein, is (or was) an insult to the many owners of horses, and proprietors of large establishments, who think proper, and are perfectly justified in using their own discretion, in adopting any means they may try or decide upon for the safety of the "Turn Out," and the public in particular, as the result of experience; and the author's argument is conclusive when the fact becomes generally known, that *the majority of the largest and richest individual horse owners in the kingdom adopt, and are known to use, the bearing rein,* to all animals where speed and blood are in hand, which fact is proved by the notice that appeared in the *Saddlers' and Coach-Builders' Gazette,* dated June 1st, 1877, viz:—*That at the recent meeting of the Coaching (four-in-hand) Club, in Hyde Park, it was*

*observed that all the horses, save in three or four instances, wore bearing reins.**

This notice is sufficient to endorse the writer's words that the bearing rein is no more nor less than a legitimate part of the set, and, *that no harness room is complete without it.*† One bearing rein with plain covered furniture can be used to any pattern single harness, so there is no real necessity for an extra rein to every set.

There may be some persons who, at a loss for fair argument, would say, that the author is interested in the manufacture and sale of the bearing rein. Such argument is not worth entertaining, considering the fact that the cost of a bearing rein is so very nominal, and little or no difference is made to the customer or manufacturer whether a rein is supplied or not, as far as the cost of the set or sets go. And, in conclusion, he would remark that if the amateur or prejudiced enemy of the bearing rein would hasten his non-success as an horse-breaker, he has only to adopt the extraordinary high-port of the "gag bit," which was expressly invented to act as a secret substitute for the bearing rein, and he will very soon find that he has established himself as an accomplished "Temper and Jaw breaker."

It is an easy matter to discover whether a bearing rein is necessary or not, and the sum and substance of the writer's dictum is, if the horse carries itself perfectly

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* It is said that the horse does not know its own strength, hence our control over it in the shafts. Therefore the writer considers the strength and presence of mind of *one man* on the box behind a team of four high-bred, well-corned, noble animals altogether inadequate, particularly in crowded thoroughfares, without the assistance of the bearing rein.

† A friend's simile in conversation respecting the use and abuse of the bearing rein was, that with restive and over-fresh horses it held much the same position as a drill-sergeant to the raw recruit.

straight and freely with a light mouth without the extra rein, by no means apply it; but if, on the contrary, the animal is a very hard and excitable puller,* or stumbles and throws its head about as though having business on both sides of the road at one time, then the bearing rein cannot, and must not be dispensed with.

It is not necessary to say that for safety the quality of the leather and furniture of the set of harness should be of the best, but *it is* necessary to intimate that no matter how good the make and quality may be, equal danger attends the "Turn Out" if the harness be not properly and judiciously fitted. The horse must never be buckled tight to its work, particularly at the traces; special care should be paid to them, in seeing that they are punched true, and buckled equal length each side. The piped or long loops should be well sewn in with strong threads, and creased, chequered, and bevilled by hand. If narrow loops are used throughout, they should be firm and nicely blocked; loose and flimsy loops are useless for the purpose intended after a few showers of rain, and very unsightly. Long breech-bands running up to the tugs are rather ancient and complicated, and add to the expense and weight of the harness—short breech-bands answering the same purpose, and are lighter for the horse to carry. If the set be *regular best*, it should be sewn four rows throughout (by hand preferred); if it be second quality, one row round is the rule; and if plain harness be ordered, it will be single solid leather in parts other than the traces, back-band, tugs, and breech-band, which are always lined, with the exception of the traces used in tramway and such work.

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* How often have we heard it said that a certain horse shall come fresh out of the stable and draw a vehicle and driver some miles without traces?

In running a horse without winkers for the first time, great care is necessary, and the whip should be kept in the socket.

Good plain solid leather harness invariably gives satisfaction. The writer supplied a set recently with square brass wire furniture, straight flapped imperial pad, square winkers, light kicking strap and tugs, brown flat lined Oxford reins, London topped collar, and revolving mouthed guard bit. This model set, (as the customer called it) was made without breast-plate, face-piece, curb, hip-pieces, bearing rein, throat-band swivels, pad-cloth, or ornaments whatever; the only extra in the set being, that the belly-band was made to buckle both on the near and off sides, for easy access and handiness in releasing the horse from the shafts in the event of accident or falling down while in the shafts.

It is a cruel mistake to run a horse in a four-wheeler *without a breech-band*, which should be so adjusted as to keep the vehicle from forcing the shaft-tugs from their proper position, in going down hill.

For piped throated collars the hames are required to be specially made in every case, the ordinary formed plain hames being difficult to adjust, and altogether unsafe.

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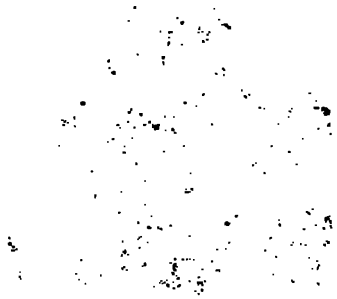


Fear and Surprise

The action of the Gag-bit (invented as a substitute for the bearing rein)

TO ATTACH THE HORSE TO THE VEHICLE.

"Slow and sure."

In attaching a horse or putting it between the shafts, the most deliberate way is the quickest and safest; bustling or hurrying and running round its head backwards and forwards is a very dangerous practice, particularly with a spirited animal. A few days ago a friend of the writer's (after many remonstrations and cautions for the rushing manner in which he always put the horse in) met with a very serious accident, nearly costing him the life of his steed; to use his own words—"He had just fixed the near side trace and breech-band strap, and was hastening round the back of the dog-cart to attach the off side, when the horse sheered away, and at the same time catching the wheel of the vehicle against a large stone fixed in the gateway, causing it to plunge, and the owner to shout and pull at the reins; ultimately, during the brief excitement, the horse got its rump under the shafts and commenced kicking, soon cleared itself of the lot, and bolting away, fell down in turning the corner, thus preventing further mischief."

It is very important that the shafts should always be elevated and drawn to the horse, and never left upon the ground for backing the horse into them.

It is a common practice to throw the cushions, rugs, mats, and whip into the vehicle from a distance, and many serious accidents have arisen therefrom.

The same methodical system as above suggested should be adopted in taking the horse out of the shafts as in putting him in. Some may say after a journey—Oh! the horse is tired—he's quiet enough now—make haste! —hurry up!—have him out as quick as possible; but it must be remembered, that the horse has a great love for home, and is as anxious to get *into* his stable as he was *for a run* when brought out fresh. Many a shaft has been broken at the stable door, and many a set of harness partly ripped from the animal's back, through the tugs, &c., catching the latch or other impediment on or near the door, in the hurry of the horse to reach his stall.

It is a dangerous practice to unbuckle the driving rein billetts before taking the horse out of the shafts, thereby losing the control of the animal somewhat. The breech-band or kicking strap (whichever worn) should always be released first, then the belly-band and traces. The occasional mention of the horse's name, and in fact, a little conversation kept up with him during the process of attaching and unfixing to and from the vehicle, such as—Woa, Charlie!—Steady boy!—Stand over! &c., facilitates time and avoids accidents, and is calculated to cultivate patience and good temper in both horse and man.

DRIVING.

"'Tis the pace that kills."

The term Driving seems, as a rule, to be misunderstood by the amateur whip, and by many whose daily business it is to sit behind a steed. We often hear it said that "a good horse requires no driving"; so it is that the holder of the ribbons should take his position with a view to steer or guide the horse, and not with the express purpose of "driving" it, which term may be, and is, often misconstrued into frequent floggings, constant shoutings, pulling or jerking at the reins, and other demonstrations.

Before taking charge of your "Turn Out," the first business is to learn how to pick up the reins—mount the vehicle—and keep your own side:—for—

"The rule of the road is a parodox quite,
As the carriages jog it along;
If you keep to the left you are sure to go right,
If you keep to the right you are wrong."

The reins should be taken in hand before the vehicle is mounted, therefore the responsibilities commence at that moment. If there are any other occupants the driver takes his place last, (unless an attendant is at the horse's head) and that without the least hurry or excitement, by stepping lightly and firmly to his place, the reins being already in hand the proper length, and the *whip in the socket.* The horse should be allowed to start itself by a gentle movement of the reins between the fingers, without the slightest flourish or noise on the part of the driver, he at the same moment moving his weight

a little to the front. The horse may be quietly spoken to, or used to respond to his name being mentioned by starting immediately and freely.

The position of the driver is to lean a little forward, after taking a firm seat, and keeping the legs well out towards the dash, and never to hang backward, excepting for the purpose of balancing the vehicle in going down hill. In driving, the reins are taken up the reverse way to riding, viz. :—from the bottom, or underside, and kept with a steady pressure, constantly feeling the animal's mouth.* Should the driver at any time become nervous or irritable, the same is communicated to the horse through the reins, which communication is calculated to give the horse increased anxiety, and want of confidence. At all times the driver should sit square and perfectly easy, without the slightest appearance of stiffness or carelessness.

In our travels we see numerous styles of holding the reins, but there is only one proper and safe way, viz. :—in the left hand; the right, or whip hand, being kept ready for emergencies. The driving hand should be held to the front, a little way from the body and on a level with the elbow; the finger nails are slightly uppermost in driving, and the reverse in riding. The *near* side or left rein passes between the thumb and first finger; the *off* or right side rein between the second and third fingers, which are kept closed together, thus securing the purchase or grip. To hold a rein in each hand† is a most awkward and helpless plan, and seems to be the system adopted in America, where the writer has witnessed many accidents arising from that cause alone, both on the road, and upon the trotting track; in one case the driver was thrown backward out of his

* The reins should never be allowed to fall or lie upon the horse's back.

† The witty carman is said to hold a rein in each hand, and the whip in the other.

buggy on to the ground, through the breaking of the reins; in fact, it had been his constant boast that the horse did not require traces, but could pull the vehicle by the reins alone. Some persons hold the reins close to the body, or up to the chin, with only the first finger between them; this is very unsafe in the event of the horse stumbling, particularly if they themselves indulge in the habit of keeping their legs under the seat, which is altogether a very helpless position, and calculated to land the driver in the gutter on turning the first corner. The occupier of the box should be particular in pulling up gradually before arriving at his destination; and in turning corners by giving a full sweep; going wide where there is room and all clear,—and the fact should be kept constantly to the front, that the driver's position behind the horse is exactly the same as the man at the wheel of a vessel. The frequent use of the horse's name is a very important item in travelling long journeys, it being not only cheering to the animal, but company for him; and the same practice is of very great service when the horse is standing in the street at doors. In driving along, should anything occur ahead to necessitate your stopping or pulling up suddenly, the whip should be elevated as a signal to those who may be in the rear.

The following is an illustration of flourishing starts on the part of drivers:—

A doctor acquaintance of the writer's was in constant danger of his life, and could not account for it. After each call throughout the day, the moment on opening the carriage door, the horses would bounce off at express speed, sometimes rearing or swerving round, and invariably landing the doctor's hat against the top of the door-way. The cause of this very restive starting on the part of the horses was not discovered until a change of

coachmen came about, and it was then found out that the horses had been regularly cut with the whip, at the sound of the handle of the door turning, and it took considerable time and patience on the part of the new Jehu, to persuade the horses to start steadily, without bounding or plunging.

Special care should be taken in driving down hill. An Hibernian friend of the writer's used to say that he "Walked the horse down hill and himself up," which indicates plenty of consideration for the animal. Many serious accidents would be avoided if drivers generally would strictly adhere to the rule of keeping their own side, viz. :—to the left, at all times, except when overtaking a vehicle.* This is the simple rule of the road in England :—You start out to the left and you come home to the left.

The whip should never mount the box without previously taking a careful survey of the "Turn Out"—to see that all the strappings are properly attached, the traces not twisted, or buckled up too tight. One of the greatest evils attending the attachment of the horse to the vehicle is buckling him too tight to his work, either in the kicking-strap, breech-band, bearing-rein, belly-band or traces. The writer has known even the simple hip cloth, through not being properly adjusted, to cause the horse to bolt away at a furious speed for some miles (and unfortunately the occupier of the box was a lady) only to be stopped by the merest chance by two roadmen, happily without accident other than a severe shock to the lady's nerves.† And another case of oversight on the part of the owner of the "Turn Out," only recently came to the writer's

* Or meeting ladies on horseback; or a drove of horses or sheep.

† Similar accidents have been known to arise from strangers fixing the rein billetts upon the single ring of the Wilson Snaffle, the horse having been used to the double rings, being billetted together.

ears. A gentleman starting rather late in the evening from an hotel yard, accompanied by his little son, whom he was bringing from school for his holidays, and on stepping into the gig (without taking his customary survey of the harness) the animal, a very fast mare, bounded away; the driver losing all control of his steed, tried and tried again to check her headlong anxiety to reach her stable, jerking the reins, coaxing and shouting, all of which were of no avail, and to add to the agony of the father his little son began to scream and cry, but not a solitary human being could be seen on the road, and fortunately no vehicle was passed the whole distance, eight and a half miles, and the mare being used to the road, and a good tempered animal, deliberately pulled up of her own accord, and trotted them gently and safely to their own door. The cause of her wild behaviour was discovered to be, that the bit had not been put into the animal's mouth before starting, and the driver had been constantly pulling away at, and hanging on to, the nose-band and cheeks of the bridle all the distance, which new proceeding was more calculated to excite the mare than to stop her. Therefore, the moral is, that no matter who may have the care or charge of the steed, in the temporary absence of the owner or driver, all persons or attendants are liable at some time or other to have their attention called away during the process of fixing the harness upon the horse, and attaching the horse to the vehicle; so the driver should never mount the box without having first felt and examined the easy bearings and proper adjustment of the whole set.

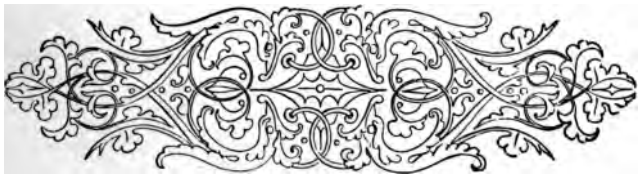
Great want of consideration for the horse is at times noticeable in the loading of vehicles, especially waggonettes for pic-nic parties; and it is a standing fact that market carriers generally, and pleasure seekers in

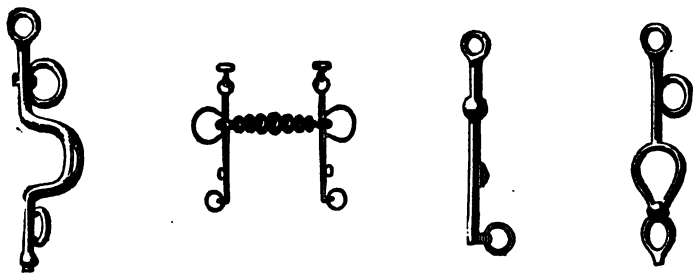
particular, seem to think more of the capabilities of the conveyance than the horse, and the writer has many times put the gentle reminder to those in charge:—"In considering or risking what the *cart will hold*, think how much the *horse can draw*."

In the summer time, and holiday times, it is the usual practice to pack human beings behind a horse as close as a tin of sardines, and often with the tugs too low, and the shafts swinging about; the cart body bumping upon the axletree,—caused by the springs being over-weighted—which, together with "We won't go home till morning," and other lively melodies in harmony with the time of evening, are all, apparently, necessary to complete the day's enjoyment. But how little can the occupants think of the enormous risk they are running whilst rocking backwards and forwards, as though they would roll in one mass out of the vehicle, and their whole attention seeming to be centred in getting to the top of their voices on the return journey; flogging, and racing up hill and down, frequently, at least as a rule, more excited or helpless, as the case may be, than when starting out, and their last thoughts being—the Horse.

Gardeners' carts, although to all appearance a big load, are, as a rule, packed with more judgment, the gardener generally putting the finishing touch to the balance by stowing himself away either on the front or extreme back of his strong and well built cart, as the case requires; and, generally speaking, his horse is well-cared for, and never to be seen distressed or neglected. There is sometimes a risk in allowing the faithful animal to hurry home in the evening, almost on its own responsibility, the driver being in a kind of semi-sleep, after his very long and laborious day's work, which generally commences with the daylight

in the summer time, and long before the dawn in the winter time. The writer has known several cases of complete smash-up, which collision in one or two instances could have been easily avoided, had not obstinacy on the one part, and vacancy on the other, have prevailed. Those in charge of gigs, traps, dog carts, carriages, or other vehicles, should always be prepared *to take either side*, (although there is one proper side) or go *clean off the road altogether* (where practicable) in cases of emergency, taking care to be in constant readiness and on the look out for runaways, or heavily laden waggons that may be slowly trudging along on the wrong side, and the attendant some distance in the rear; likewise for "sleepy" drivers, "ignorant" drivers, and "indifferent or amateur" drivers, all of which are frequently to be met with on the road. And the writer thinks the Shakesperian lines (he once saw nailed up behind a certain nobleman's stable door) peculiarly applicable to the foregoing remarks, namely, that—"'Tis a cruelty to load a falling man," and "Good words are better than bad strokes."





MEMOS. NOT TO BE FORGOTTEN IN CONNECTION WITH THE HARNESS.

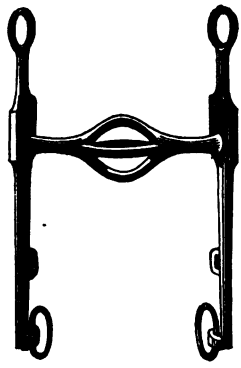
The most important items to be observed in reference to the *comfort of the horse*, are—

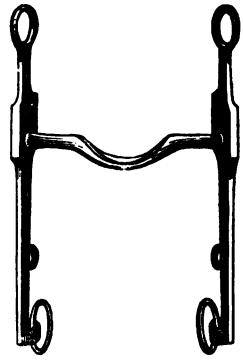
THE BIT,
THE COLLAR,
and THE SADDLE.

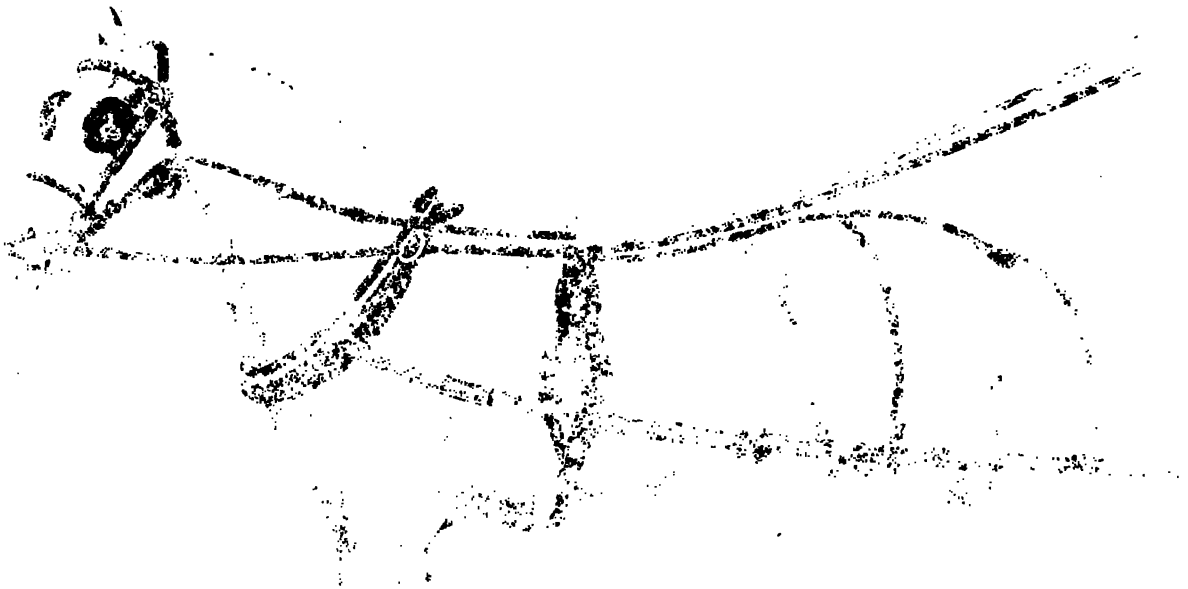
The most important items to be observed in reference to the *safety of the driver*, are—

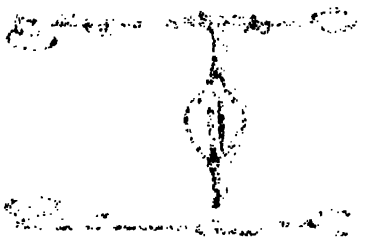
THE REINS,
THE BACKBAND & TUGS,
THE TRACES,
and TOP HAME STRAP.

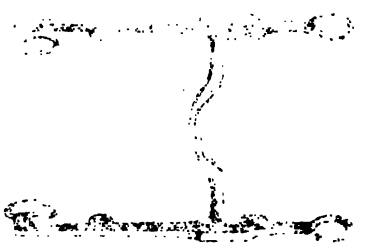
These should be systematically examined before mounting the vehicle.

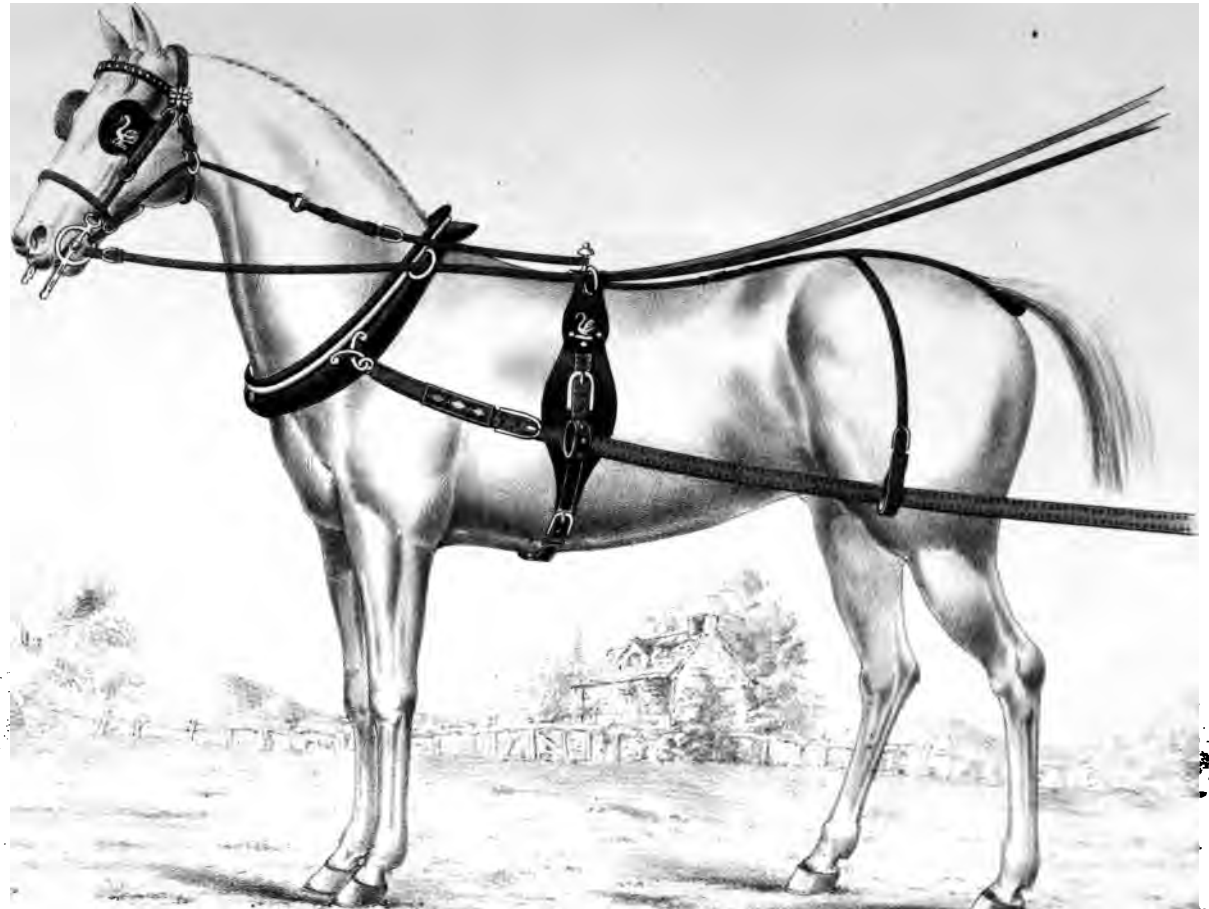












Ease and Comfort

UNHARNESSING.

"I rather tell thee what is to be fear'd."

No doubt there may be a few rough and ready readers of the above title who would ask or put the question—"What art can there be in taking a set of harness off a horse"? or say—"I can soon rip it off, and without any ceremony." The writer would answer—if there is no art in the business of releasing or unburdening a horse with the easiest and quietest despatch, after its hard day's work, or perhaps after a long and tedious journey under the broiling sun, there is at least a certain amount of judgment and consideration necessary; and it is, therefore, the successful horse-keeper's rule that a certain system shall be laid down and regularly adhered to. It is the general practice, in fact it may be said to be the universal custom, in undressing or taking a set of harness off a horse, to *commence* at the driving rein billetts, by unbuckling the same from the bit, and bringing them back to the hind part or territt of the saddle. The writer's advice is that both *time is lost* and unnecessary *punishment* is inflicted upon the horse by so doing.

If the *girth be first unbuckled*, it has the immediate effect of releasing the pressure of the saddle from the horse's back, and allowing a gentle current of air to pass under the same without fear of chill, or other consequences; and it has the double effect of easing the dock of the crupper from the root of the tail, particularly if the saddle be slightly moved backward, say a few inches, as it should be in all cases and circumstances, whether after riding,

driving, or carting, a few minutes at least before taking the saddle and crupper finally from the horse's back. The heated parts are thus gradually cooled and relieved without the risk which attends the instantaneous removal of the saddle. Prompt removal of the saddle invariably follows the system of unbuckling the billetts at the bit first of the set, and which bad method, or want of thought, is alone responsible for the many sore and scaly tails we see about the region of the dock; so much so, that some tails that have been thus neglected, have the appearance of a number of permanent sores and running wounds underneath, which is caused by the horse pressing and keeping down the tail when the saddle is unbuckled and dragged off, with all its surroundings at a moment's notice; and very often the behind part of the steed is pulled half across the stall. Before the saddle is taken off altogether, after loosening the girth, the reins should be cleared of the harness and hung up, not doubled or twisted in any way, but suspended as nearly straight as possible.

THE HAMES follow in due course, being unbuckled whilst upon the horse's neck, and then removed. They should never remain upon the collar, to be taken off at the same time, and left upon it; such doing is a strong illustration of want of feeling for the horse. It may be considered a saving of time and easy enough to take old and wide collars off the neck with the hames attached, but the quickness of the business, if done quickly at all, is chiefly owing to the extreme anxiety of the horse to wriggle through the infliction, and get it over. It is usual on taking the hames off to examine the top and bottom straps, as they are an important item in the set, and it is necessary to see that the punch holes are all sound. The advantage of taking the hames off before the bridle

is, that the collar can be moved a few inches up the neck, relieving the same of the weight, which is to the horse, during the brief moment of removing the bridle, as great a luxury, and equally refreshing, as the easing of the saddle and dock before taking off altogether.

THE BRIDLE should first be unbuckled at the throat-band, and even then it should not be *pulled* down, but *heaved* off with the two hands, the fingers being placed under the head-strap of the bridle behind the horse's ears, which top part being brought to the front allows the bit to *fall* from the mouth without danger to the teeth. The bridle should never under any circumstances be taken off, or the bit out of the horse's mouth, while it is in the shafts; many serious accidents have been known to come about owing entirely to that dangerous practice. An instance recently came under the writer's notice where a pony and trap had been left at a public house door with the bridle hanging upon the points of the shafts, and a feed of corn in a bucket upon a trestle before it. The pony was startled by a boy coming round the corner playing with a whip top. The bucket of corn and trestle were upset, and away went the animal with the bridle dangling between its legs, and there being no possible chance of controling the bare-headed runaway, a general smash up was the consequence, and in less than thirty minutes from the time of stopping to feed, the pony was killed, (put out of its misery) having staked itself by trying in its mad career to leap some iron palings with the trap behind it, and the wonder was that several human lives were not lost in their efforts to check the animal.

In removing the SADDLE or PAD the left hand is put under the front, and the right hand to the dock, after first throwing the breech-band (if worn) over the back, across

the top of the crupper, and the lot is instantly and easily removed without any opposition on the part of the horse, such as tucking the tail under, or as some say, biting the dock. By adapting the above simple system a great deal of time and trouble (besides pain to the horse) is saved, and the ready assistance of that noble animal is secured, particularly when he becomes thoroughly acquainted with the new, easier, and more humane regulation.

To take the COLLAR from the horses neck it has been before mentioned that the (hard iron) hames must not pass over the eyes of the horse at the same time, in any class of harness, whether gig, cab, or cart; and whatever is done through carelessness or clumsiness to irritate the horse, is sure to be communicated to the attendant, and thus both become chafed, which invariably ends in constant shoutings on the part of the man, persistent dancing about, &c., on the part of the horse, and probably the fork may be introduced, which frequently ends in the animal being pricked and spoilt. In taking the collar off it is usual to drag or lug at it from the front of the horse with both hands, and if it be at all a tight fit, one tremendous pull is given, after a series of jerks, in which the whole weight of man and horse is brought to bear, which invariably results in at least three, and sometimes four, ungraceful, if not brutish events occuring, viz:—The moment the collar is past the eyes, after being pulled in the above helpless way, the inside of the throat cannot possibly miss striking the animal's nose, which blow is always a violent one; and if the stable has a low roof or is a temporary structure, the top of the horse's head comes in contact with the timber above, the moment its nose is struck, causing the horse to rebound or reel to the full extent, which accounts for the rough and bristle like tops of the tail frequently to be seen, and is the effect of

collision with the rear of the stall. All the brushing and combing that can be done will not make these broken bristles lie down or wear any other appearance than that of having been gnawed by rats. When the collar is thus pulled forcibly from the head, another event frequently occurs in the heat of temper, or (to use a milder term) under the impulse of the moment—that the collar is either thrown upon the floor, or, in no gentle mood, landed in the manger, (which of course means wear and tear) during the process of fixing the head stall or halter. That the above illustrations of the results of rough and ready treatment are facts, and occur day after day more or less, is well known, and the writer, by virtue of his many opportunities in connection with his business and sundry other surroundings, can vouch for and verify any illustrations a personal interview may desire, and at the same time places before his readers his own system of taking the collar off, which puts any and all of the items or results before mentioned out of the question, and the fact of a horse slipping backward upon its haunches, an impossibility. As before intimated the collar is the most important part of the whole set, both in fit and wear, and the putting on and taking off, if not done carefully, is seriously calculated to affect the temper of the horse.

It is not necessary to stand directly in front of the horse for drawing the collar off; the quickest, quietest, and safest method is, to stand a little to the near side, bringing the collar close up to the ears with the right hand only, (after it has been reversed or turned over the way of the mane) the left hand is placed up the face with a quiet rub, which humours the temperament of the horse, then, by leaning stiffly to the steed and pressing the collar towards the operator, he becomes as it were, for the moment, a part of the horse, and with the assistance of which a little twist

of the head is given, and the collar glides or falls quietly upon the left arm, without having caused the least confusion, and is done much easier and in shorter time than the bungling and helpless way of hanging at the horse's head with both hands to the collar; and the improved system is looked upon by the horse, in the course of an experiment or two, as a luxury and pleasurable relief. Indeed, he will quietly reciprocate any good feeling shewn towards him, particularly when his help is asked. Rubbing the ears with the hands for a few moments is always appreciated by the horse, after taking the harness off, and is calculated to promote early friendship.

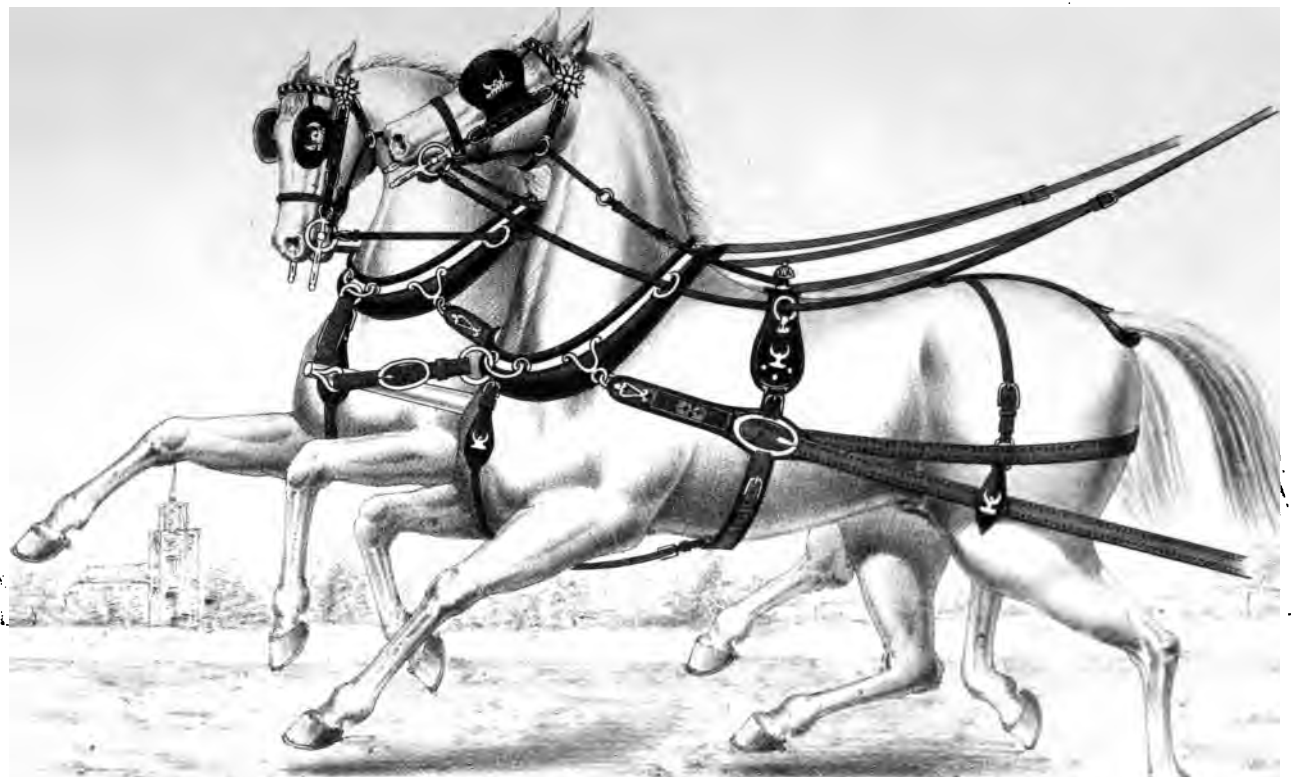
After the steed is cleared of its harness, the necessary cleaning, such as washing, whisping, feeding, watering, &c., follows, which should be done with as little fuss and blowing on the part of the groom as possible. The hissing of some men during their stable business can only be compared to a small steam engine, which inhaling of the dust on the part of the man (and it is at times tolerably plentiful) cannot be looked upon as in any degree a healthy habit. After the horse is made comfortable the harness should be cleaned and put in its place; the lining of the collar and the crupper dock should be immediately sponged over with clean water; and the pannel of the saddle brushed; the reins wiped straight down with a clean dry cloth, after damping; the bit and curb taken from the bridle, washed, dried, and then thrown into a box of slacked lime, which should be kept for the purpose; the traces, back-band, breech-band, &c., straightened out and shined up with the compo. brush, the furniture rubbed over, and the flaps, &c., of the saddle, side pieces of the collar, housing, and other patent leather parts, wiped lightly over with an oil rag, and polished off afterwards.

The whip should never be thrown or placed in the corner, but hung up by the thick part of the thong upon a wooden block or spring fixed in the harness room; after which the vehicle must be looked to and put under cover.

During a conversation respecting the harnessing and unharnessing of horses, a friend of the author's once complained to him of the extreme restiveness of his animal, in the stable, when fitting for the road, and *vice versa*, and after a journey, in grooming, so much so, to use his own words, that it became positively unsafe and dangerous to approach the animal in the stable with any part of the harness or tools, the horse seeming to get every day worse and worse. The writer, on visiting the stable, perceived that the moment the owner approached his horse to take the head collar off, it began to tremble from head to croup, and literally danced about the stable at the merest touch, ultimately becoming actually savage, biting and kicking at the same time. The author watched the business quietly through, and decided in his own mind that the blame rested entirely with the man and not the horse, the fact being that the owner commenced with, and kept up, one continued system of shoutings at the terrified and nervous tempered animal, which incessant and excitable bawlings were mixed with anything but poetical language, together with numerous gestures as though it were his (the owner's) momentary intention to suit the action to the word with the aid of the nearest stable implement, causing the poor animal to fly from side to side of the stable in a most frantic manner; the time consumed in this most disgraceful and ridiculous performance was over thirty minutes, ere the horse was between the shafts and ready for the road.

In answer to the owner's query—"What's my remedy? I've made up my mind to sell the brute." and

several other signs of thorough upset. The author's answer was, "Lend me your horse for one week." It was at once handed over—the writer sending for it to his own stable; and that day week the owner, to his very great astonishment and delight, witnessed the fact of his once savage brute being harnessed, attached to the vehicle, taken down the lane a hundred yards, unharnessed, put into the stable, and everything in its place, unaided, in about fifteen minutes, and all without the slighest noise or commotion; the only movement in the stable on the part of the horse being when it came round of its own free will to put its nose into the collar. In reply to the owner's second query—"How have you done it?" The author's answer was, "System Sir, made up of kindness and patience, in equal proportions."



Pleasure and Action.

THE VEHICLE.

"Who dares not drive by day, must walk by night."

As the Egyptians were the first to capture and train the horse, so they were the first to use chariots, and the first mention we have of a chariot is in the 43rd verse of the 41st chapter of Genesis, where it is written—"That Pharaoh made Joseph ride in the second chariot which he had." These chariots, although no doubt very elaborately decorated, were very different vehicles to the modern chariot, as may easily be ascertained by examining any of the pictures of the Egyptian, or even the more modern Greek and Roman chariots. We are told in the 3rd chapter of the Song of Solomon, that—"King Solomon made himself a chariot of the wood of Lebanon." But in those early ages chariots were only used in battle, or to swell the processions, and increase the pomp of monarchs, and were never used by private individuals, who rode on horses, asses, mules or camels.

At what time carriages were first used by private individuals is somewhat doubtful. According to a writer in the Encyclopedia Britannica, carriages for the conveyance of private individuals were established first by the Romans, who, it is asserted, had a great variety of these vehicles; which at first—owing to the narrow streets and roads, which were mere bridal paths—were very small. The use of the carriages becoming more general led to the formation of those excellent roads—such as the Appian way, which was made 331 years before Christ—for the construction of which the Romans were justly celebrated. The carriage which figured in

public ceremonials was the *Carpentum.* It was of slight construction, mounted upon two wheels, and was sometimes covered. The Gauls had a kind of carriage called the "Benna" or "Sirpea," constructed of wicker-work. The "Essedum" of the Romans was a two-wheeled carriage, copied by them from the war cars of the "Belgæ." These various vehicles were splendidly gilded with gold, and ornamented with precious stones.

When the feudal system, which was founded upon military service, was introduced, the use of carriages was for a time prohibited, as it was considered to have an effeminating tendency, which rendered the people who used them less fit for military purposes. So early as the beginning of the sixteenth century there were covered carriages; but their use was restricted to ladies in the highest ranks of society only—it being considered effeminate for gentlemen to ride in them. In 1474, however, the Emperor Frederick III. visited Frankfort in a close carriage; and in the following year he returned in a still more magnificent covered carriage. At a tournament held at Ruppin in the year 1509, the Electress of Brandingburg appeared in a carriage gilded all over, while that in which the Duchess of Mecklenburg rode was hung with red satin. When Cardinal Dietrichsten entered Vienna, no fewer than 40 carriages went forth to meet him. That same year the Consort of the Emperor Matthias made her entry in a state carriage covered with perfumed leather. The carriage of the first wife of the Emperor Leopold was said to have cost 38,000 florins. The panels of the Emperor's coach were of glass. Pepys, in his diary, relates a curious accident that occurred to Lady Peterborough through her ladyship using a carriage with glass windows. He says—"Lady Peterborough being in her glass coach with the glass up, and

seeing a lady pass by in a coach whom she would salute, the glass was so clear she thought it was open, and so ran her head through the glass." We are not informed that any such accident occurred to the Emperor Leopold in his glass coach. At the magnificent Court of the Duke Ernest Augustus at Hanover, in 1681, there were 50 gilt coaches with 6 horses each; and shortly after that grand display, carriages, despite the feudal laws, became common all over Germany.

Carriages were used in France at a very early age. So far back as the year 1294, an ordinance of Philip the Fair forbade citizens wives from using them. If one might judge from Chaucer's poem entitled "The Squyre of Low Degree," it would appear they were used in England in his day (1328–1400) for he says:—

> "To-morrow ye shall ride on hunting fare,
> And ride my daughter in a chare;
> It shall be covered with velvet red,
> And cloth of gold all about your head,
> With damask white and azure blue,
> Well dispers'd with lillies new."

When Richard II. fled from his rebellious subjects, his mother was conveyed in a carriage. It was not, however, till the time of Queen Elizabeth that coaches became common in England. Probably those famous state journeys called "Royal Progresses"—like the one to Kenilworth—of which her majesty was rather fond, created a demand for carriages, and gave an impetus to coach building, which, during her reign, became a very important branch of industry; and continued to flourish so rapidly that at the commencement of the seventeenth century it was calculated that in London alone there were upwards of 6,000 carriages.

Hackney carriages were first introduced into France in the beginning of the reign of Louis XIV. by one Nicholas Sauvage. In 1650 Charles Vilmère secured the exclusive right to hire out carriages in Paris, and for this privilege he paid 5,000 livres. The first vehicle similar to our modern omnibus commenced running in Paris on the 18th of March, 1662. The fare was five sous. Hackney carriages were first established in London in 1625, twenty-five years before their introduction into France. In 1634 there were about 20 such vehicles plying for hire from the "May-pole"; in 1637 there were 50; in 1652 they had increased to 200; and in 1654 to 300. In 1694 they were limited to 700, but in 1715 the limit was extended to 800. The Hackney carriage maintained its place till superceded by the more modern vehicle the *Cabriolet de place*, better known by the shorter title of "cab." In 1834 Mr. Hansom introduced the vehicle which bears his name, and upon which several improvements have been made. The oldest coach in the kingdom is the Lord Mayor's coach, which was built 1757 for Sir Charles Asgil, the Lord Mayor elect that year. The next oldest is Her Majesty's state carriage, which was built in 1761, from designs by Sir William Chambers. From the official description of this carriage, which is said to be the most superb ever built, it appears the body of the carriage is richly ornamented with laurel and carved work, and beautifully gilt.

Such, then, is a brief history of carriages from the earliest ages to the present time; but to give a detailed account of all the various descriptions of vehicles would be impossible in a work like the present. Indeed, to enumerate all the improvements that have been made in coach building would occupy too much space. There are however two very important improvements which cannot

be passed over. One of the most useful improvements in connection with coach building is the Collinge Axle, invented in 1792, and by means of which wheels only require to be oiled once in several months. The other great improvement is the Eliptic Springs, patented in 1804 by Obadiah Elliot, and by means of which carriage travelling is made more comfortable; and the labour of the horses much lighter. The Collinge Axle, although it obviates the necessity for frequent lubrication, does not dispense with it entirely. The axle of all vehicles, whether those of carriages or carts, should be regularly oiled or lubricated, as it not only renders the labour of the horse much easier, but preserves the axle and wheel from wearing so rapidly. It not unfrequently happens that through the axle not being regularly lubricated it becomes uneven, and both it and the hub of the wheel wear out much sooner than they would do if carefully and regularly attended to.

Care should be taken on the return from a journey to see that the vehicle is properly washed, and all soil, sand, or grit is removed from the axle, as it is very apt to get into the hub and grind either it or the axle into grooves or ruts, which if not noticed in time may lead to serious accidents. In order to prevent break-downs, or spills, the vehicle should be regularly inspected and kept in good repair. It is a very bad plan to leave vehicles exposed to the weather; they should, therefore, be kept under cover when not in use, as the sun not only spoils the paint and varnish, but shrinks the wood to such an extent as to render travelling in a carriage long exposed, dangerous, as not unfrequently after long exposure to the sun's rays, the tires become loose. For this reason it is never safe to purchase a second-hand carriage, as it not unfrequently is exposed in open yards and places without

any cover from the sun, and before it can be made sound and comfortable a greater expense has to be incurred than would have purchased a substantial new carriage. It is no uncommon thing for old ram-shakle traps to be painted up and sold—"a bargain"! but the unfortunate purchaser finds, after spending pounds upon it without being able to make it comfortable and secure, that the bargain is anything but a bargain to him, and is very glad to sell it for very much less than he gave for it.

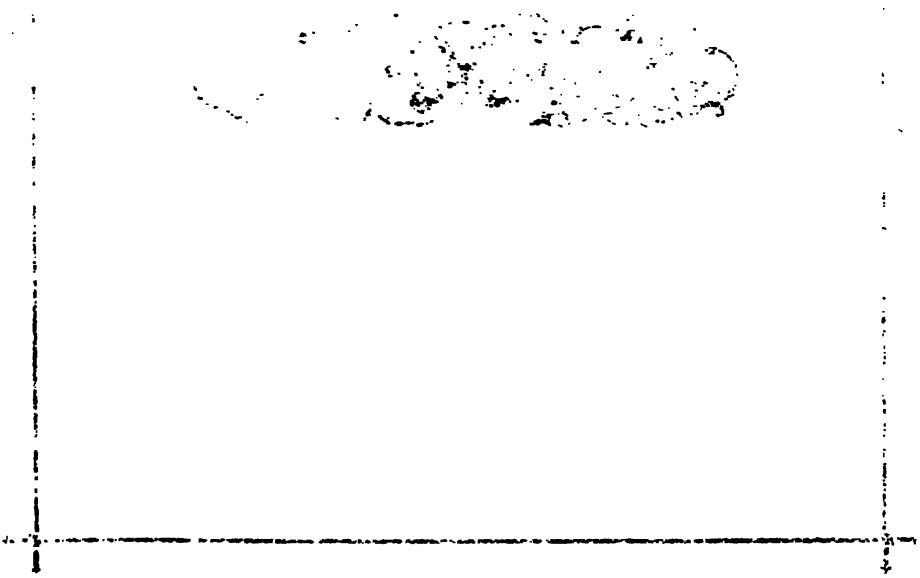
JIBBING.

"Good words are better than bad strokes."

Shakespeare says—"We cannot all be masters;"—therefore if it should happen, as it sometimes does, particularly with strange horses, that the animal be undoubtedly master of the position for the time, and will not go forward, brute force should never be resorted to by the driver, it not only being as a rule labour in vain, but serious risks are involved, particularly in streets and crowded thoroughfares, as the horse is very apt to rear and plunge, and sometimes to suddenly bolt, after backing through shop fronts, and overturning the occupants of the vehicle. On a horse becoming stupid in the shafts, the holder of the ribands, if an amateur, should first ask himself the question—Is it my bad driving? A new purchase that had previously been handled with a light hand, kindly spoken to, and considerately driven, is particularly sensitive to the jerking and bustling of an inexperienced whip.

On being satisfied that the sudden obstinacy of the horse is from no fault of the driver, the harness should be carefully examined, it not unfrequently being the case that the collar will prove too short, or the traces twisted, and, like the curb, too tight, or a breechband is required, or may be dispensed with altogether, according to the vehicle in use; the whole bearing of the harness and load should be carefully noted, and if found satisfactory, the horse is either a jibber, or is not as yet familiar with the strange handling above referred to. The first business, after the horse has given repeated illustrations

cart, with one or two horses in the front of him. Each start should be done without the whip, and for short distances only. It has been found that the most obstinate jibber has been glad to go freely in the shafts of a light vehicle, after a few lessons in a loaded cart with two good steeds in front of him. If a horsebreaker be engaged, particular attention should be paid to his system of treatment, and strict observance of his instructions, both in the stable and out of doors. It has been said of many horses that they were "not able to pull the cap off a man's head," but after a few patient lessons and kind treatment they have been termed willing to "pull at a standing tree."



The Author's Centaur.

RIDING.

"Hold fast, sit sure."

Riding is said to be the poetry of motion; anyway, it is the most invigorating and healthy of exercises. We are taught that horsemanship emanates from Egypt, and that Egypt was the great and original breeding place for horses; we are likewise told that Solomon obtained all his horses from Egypt, the price averaging 160 Shekels, or about £18 English money, for each animal. According to the Greek writers, Sesostris was the first who taught men to tame and ride horses. Six hundred years after Solomon, Xenophon says that Persia possessed no horses before the age of Cyrus, but afterwards produced the finest in the world, and all were horsemen, in fact the very name of Persia became associated with horsemanship, and the present of a Persian horse was a gift indeed. The Greeks became famous for their horsemanship about the time of, or just before, the Trojan war, (1192 B. C.) hence the Grecian fables of the *Centaurs*, or as Ovid calls them semi-human horses and semi-equine men. It is said that the Mexicans fled at the first sight of the Spanish cavalry, thinking they were "monsters." The Half Breeds of North America are considered the most extraordinary and wonderful horsemen in the world. In

their trapping and other expeditions on horseback, the saddle and bridle were not thought of, sometimes a piece of fish skin or strip of animal's hide with noose for the toe was sufficient to act as a stirrup, &c., a plain cord of the same material for a bridle and bit, and a piece of cloth or hide underneath the seat. In fact, they have been known to mount the wildest steed and give him full play over hill and vale, mountain and torrent, through river and marsh, and ultimately bring him home (guided by the hand alone) as docile and tame as a lap-dog. The Arabs are good riders without the bridle and saddle, and are frequently to be seen with a common halter and piece of linen for the horse's back. The Arabian horses are considered by some the more active and pleasant to ride than the English thorough bred; but such is not the general opinion. The Arabs are known to be particularly fond of the horse, and would rather lose their lives than part with their steeds. In fact, the horse reciprocates the good feeling, fully appreciating the constant care and attention shewn towards him by his master—whom it is no strange sight to see fondling and embracing, and sometimes even kissing, his horse. The Turkish horse is descended from the Arab, and are notedly splendid creatures. The Turks are good riders and very kind to their horses, and the steeds are always very gentle and obedient. The men are never known to thrash or abuse their horses, and a vicious animal is rarely to be found among them. It is a common thing to see a Turkish horse kneel down to receive its rider; such is the result of good training. In Turkey, riding is the rule and driving the exception, coach building being somewhat in its infancy, at least compared with our own country. For riding, the Turks prefer horses; the Arabs are more in favour of mares. The Ganchos are supposed to be the cleverest horsemen at lassoing wild horses, which are to be seen in their

native state on the prairies of North and South America, in Tartary, the centre of Africa, and the deserts of Arabia. Among the wild horses of South America the mares are seldom tamed, but allowed to roam about with their offspring at pleasure. It is the great ambition of the young Indian to possess a good horse for buffalo hunting, and if he cannot get it by fair means he will steal one. In the art of riding they are entirely self-taught, having no knowledge of the "hunting seat," which is so much preferred and generally adopted in England. The Indian stands astride, as it were, in performing his wonderful evolutions; his grip to the horse is (as we should term it) the "fork" or military seat. The position of the Indian upon the horse's back, and that of the jockey of the present day are great extremes.

It is said that races were first instituted in England in the reign of Charles I.; and it is also asserted that Cromwell kept fleet horses, no doubt for the purpose of carrying the mails and other despatches.

Horsemen should be careful not to ride long stages without feeding their steeds; some have been known to ride thirty and forty miles, which is a great act of cruelty; occasional small feeds and a good meal at the end of the journey are most beneficial to the horse. In riding a journey the horseman should start at a moderate pace, and finish in the same way, thus graduating the horse to his work and coming home cool. If quick travelling is necessary, the saddle should be eased occasionally in going up hill. The tired hack should have his feet washed and legs bathed with warm water at his journey's end, and the hands should be carefully rubbed down the horse's legs for thorns, &c. If the steed should go off (or appear to despise) his food, it is a sure sign that rest is required.

It is an important item that the hackney saddle should be a close fit, but must not hurt the horse's back. The larger the saddle the better for the horse, the weight of the rider being spread over a larger surface; and the same rule applies to the comfort of the rider. The girths should not be buckled tight, particularly when a breast-plate is worn. The life of the rider should never be trusted to a single girth, and when two single girths are used they must be crossed. The best and safest girth is the "Fitzwilliam," which is not only the most secure but most comfortable for the animal; as it consists of one broad web band as the main or body girth, and a narrow one passing through loops on the top of the broader one as the safety girth, each one being buckled independently, with three buckles in all at each end.

The saddle pannel should be carefully and constantly attended to, both as to the stuffing and cleanliness. The back-stuffing (as it is termed by the trade) of a saddle is a very important item in connection with the welfare of the horse and the safety of the rider—none but the very best and cleanest wool should be used; where common wool or flocks are used, a hard or long ride will cause the perspiration to clog the same, and form it into knots, hence the term "cut like a knife," thus causing wounds and sores.

The crupper and breast-plate should not be worn for wearing sake, neither should double reins or double bits for ordinary exercise or short journeys. After a day's hunting, or few hours' ride, the saddle should by no means be taken immediately from the horse's back on reaching the stable, but the girths should be unloosed and the saddle moved a few inches towards the croup, for the purpose of allowing the horse's back to gradually cool during the process of swilling the legs, &c., (see Un-

harnessing.) Hackney cruppers are considered unsightly, and have been frequently the cause of sore places about the region of the dock. The necessity for the crupper is invariably more the fault of the rider than the horse; a good rider never shows his stockings, but it is frequently the case that many whose daily business it is to sit upon a horse are frequently to be seen with their trousers up to their knees; such are the rollicking horsemen that require cruppers, trouser straps, and frequently tying or holding on. In riding, or attempting to ride, the old rule is "To look before you leap," and the real horseman says "Keep close to the pigskin," hence the term "daylight" between saddle and man, therefore it is equally important the saddle should fit the horseman as well as the horse.

The first business of the amateur is to learn to exercise patience ere he can excel as an equestrian; next, never to start until he is ready, (which rule applies to everything through life) and to avoid flourishing or irritating the horse. This advice was given the author by an old Balaclava Veteran, with the reminder—"Put a beggar on horseback, &c." The writer thinks that nothing looks so thoroughly ridiculous as the back view of a full-grown, green amateur, who appears mounted for the first time trotting through the most public streets, specially got up with frock coat and button-hole, patent leathershoes, and stirrups too short, a bran new saddle and bridle, and himself hanging on by the spurs, his elbows elevated, and shoulders up, as though endeavouring to overtake the horse or imitate the monkey. Such is the picture often to be seen at holiday and other times of the ambitious green-horn, who, at an advanced age, and without any preparatory lessons or practice, vaults into the saddle. It is not the forte of all men to excel in horse-manship, and the author has frequently met, and knows

several horse owners who have not yet got, and in all probability never will get, beyond the perfection of a walk; their sensible motto is discretion, and if a trot is ventured it is not taken advantage of in towns, but out in the country where there is no fear of making an exhibition of themselves; but, the poor horse suffers from being jolted and jerked, pulled and spurred by the clumsy, awkward, and weighty rider. The amateur horseman, after he has got proficient in mounting and dismounting, should learn to walk the horse. In riding, the reins are taken the reverse way to driving, viz.: from the top, and the fingers held down and kept towards the centre of the body, neither up nor down, and a little way from the body, in much the same position as in driving. The mouth of the horse should be felt lightly and regularly with the reins, and at all times to be kept well in hand; the rider's elbows and toes should be kept somewhat in, and heels down; the head erect and the back hollowed, but by no means to lean backward; a good grip of the saddle should be cultivated, and the feeling to be educated and persisted in is one of firmness, ease, freedom, and independence.

In trotting, the horse must be allowed to start before the rider, which should be done without using the spurs, flourish of the whip, or noise of any kind; a gentle touch or raising of the reins and pressure of the knees, together with a slight leaning forward, will put the educated horse upon the steady and straight track immediately, the rider keeping to the saddle a few seconds and then lightly falling in with the step of the horse; then, and only then, can the luxury of a steady or fair swinging trot (such as our late Lord Palmerston and the Noble Duke of Wellington were wont to enjoy) be appreciated. The same care should be taken in pulling up or stopping the horse, not

(as is often the case) done on the sliding scale; but the horse should be consulted, and the walk is brought about without the least jerk, strain, or effort. The same rule applies to the canter, which is beautifully illustrated by the hand gallop of a lady's hack with the musical accompaniment (especially on a clear frosty morning) of the firm trot of the companion at her side. The hunting rule is to ride "slow at timber" and "fast at water."

As regards the bridle, the least complicated and easiest for the horse in business or pleasure is the "Snaffle," which simple bit can be made more effective in the hands of an experienced horseman, than the most expensive "Weymouth" when used by our heavy-handed amateur. The "Snaffle" consists of a single head, single rein, and single bit, which is invariably used for racing over turf, allowing as it does, the full stretch of the horse's neck; for general business the "Pelham" is used, consisting of single head, single bit, and double rein; for hunting and military purposes the "Weymouth" bridle is adopted, which embraces double head, double reins, double bits and curb, in the use of which great judgment and feeling are required, on account of the excessive leverage on the curb bit. The author does not agree with twisted, jointed, or high-port mouthed, or complicated bits in any case. The bridle should be adjusted so as to fit easily, and the cheeks should be regulated according to the carriage of the bit in the mouth. The throat-band should have fair or easy play, just being sufficiently tight to keep the bridle in position without danger of being thrown off by the horse jerking his head up or down. All extra strappings or superfluities should be adjusted with equal judgment, so as not to chafe the horse or risk the rider's life.

Shakespeare says—"What wound did ever heal but by degrees," which well applies to the use and abuse of spurs.

Many indifferent horsemen seem to think that spurs were invented for the special purpose of holding on by, and have come to grief accordingly; but not until the horse has been unnecessarily punished by having its sides gored and gashed for several inches, causing blood very often to trickle down its side freely.

The cruel spurs and gag-bit were not known in early days, as we learn by the Fresco representations of the Parthenon at Athens, the horse being guided by a word or movement of the hand of the rider, the same as our cart horses of the present day are to a certain extent. The amateur horseman should by no means wear spurs until he can sit a horse properly, and has become perfectly familiar with the real use of them. The military horseman rarely touches the skin with the spurs, yet he can guide (or ease) the horse to the right or left, and forward or backward by a slight pressure of the knee, and sometimes is understood by a slight shake of the foot or leg. Spurs, used without discretion, not only wound the horse but affect his temper, and endangers the life of the rider.

The same rule applies to the unnecessary application of the whip, either when riding or driving; and it must be remembered that a "long journey and swift" is dangerous, and that it is good policy to frequently pat, or *make much of*, your steed, at the same time to call him by name. The horse should never be flogged for shying, but the object shied at should be steadily and carefully approached, or rode up to; this will satisfy the horse, and tend to give him confidence in the future.

THE STABLE AND STABLE FITTINGS.

CLIPPING, CLOTHING, SHOEING, FEEDING, CLEANING AND GENERAL STABLE MANAGEMENT.

"Allow not nature more than nature needs,"

The old proverb says—"It is usual to lock the stable door after the horse is gone," which figurative expression plainly indicates to all horse owners, and particularly to those about to set up a "Turn Out," the real necessity, not only for a good system in reference to the steed, but a watchful eye upon all its immediate surroundings. The first object should be to secure, if possible, a roomy home or domicile for the horse, which must not be too dark or too light. The next considerations are good ventilation, and perfect drainage; general cleanliness must be observed; pure corn and prompt attention are absolutely necessary.

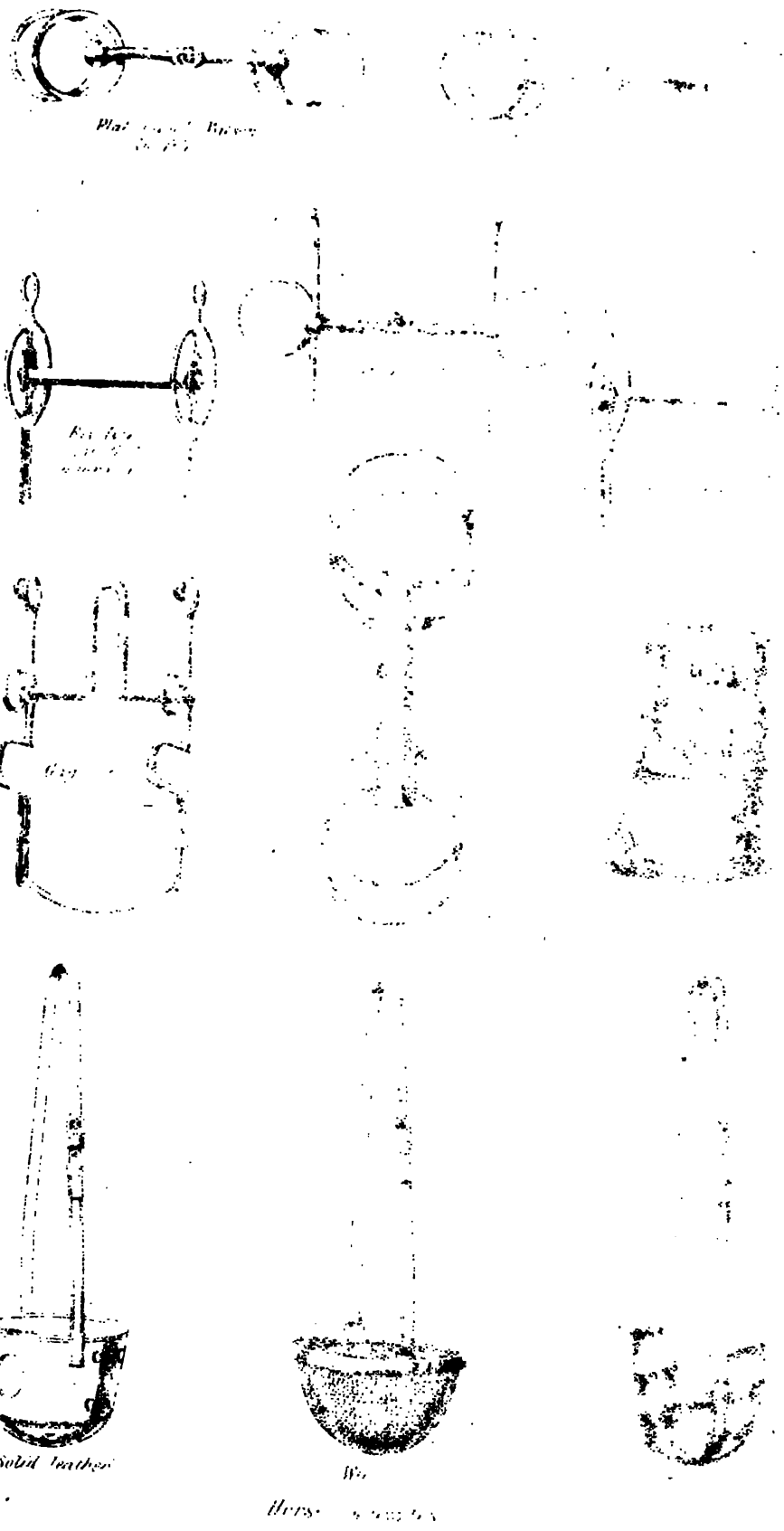
If the horse is to be fastened up by the head-collar, the size of the stall should not be less than 8 feet by 6 feet; if a loose box is intended (which is always preferable) it should be at least 12 feet square. Loose boxes possess great advantages over the stall in many ways, more particularly as regards the exercise given the horse by having his liberty. The floor should be laid with best hard bricks, which are easily kept clean and sweet. Sloping floors are very objectionable and injurious to the horse, particularly when he is tied up in the stall, hence his invariable resting position being either across the stall or with his tail in the manger; oftimes the horse is to be found at the full length of the halter rein. Gratings in

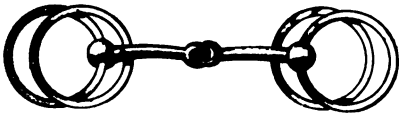
the centre of the stall are very unwholesome, are somewhat draughty, and accumulate deposits, and unhealthy fumes arise from the sewer gases. All urine should be conducted outside the stable by a gutter from behind the horse, and no dirt should be permitted to remain in the corners of the stable.

The arrangements for ventilation should be complete, and fixed above and below, but not immediately behind or before the steed. The stable should not be kept too cool or too hot; the proper temperature can be easily regulated by the thermometer, without which no stable is complete. The average should be 50 degrees in winter and 70 in summer.

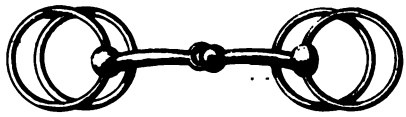
The walls of the stable should not be perfectly white, but somewhat of a drab or grey colour, and paint preferred, which can be washed over as often as desirable —say once a month. The stable should be boarded round a few feet up the walls from the ground, no rails, or other impediment or obstruction should be within reach. Dark stables are never clean, and unclean stables are extremely unhealthy and dangerous for the animal's eyes. Too much light is not advisable, therefore this particular department rests more or less with the judgment and humane feeling of the horse owners. The windows should be as high up from the ground as possible—say about 8 feet to the bottom pane—and if the window frame is made to revolve it will greatly facilitate the ventilation. The glass should not by any means be low down, on account of its liability to be broken.

The manger should be a good depth, and about 2 feet long, and so constructed as to prevent the possibility of the corn being wasted. The hay rack should be on a level with the manger, and on the near (or left) side of the

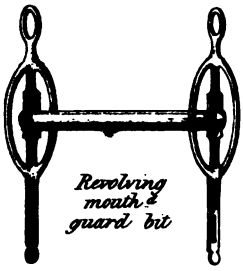




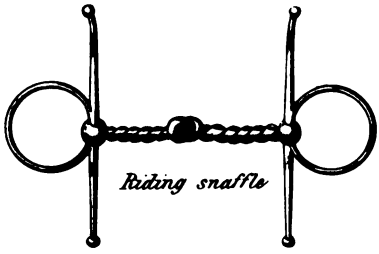
Flat ring & Wilson snaffle



Round ring & Wilson snaffle

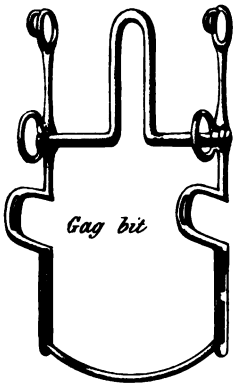


Revolving mouth & guard bit



Riding snaffle

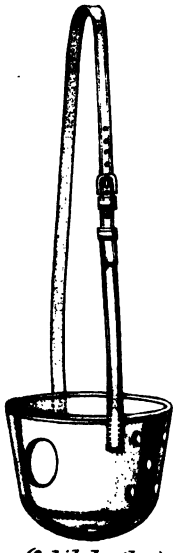
Liverpool loose mouth & guard bit.



Gag bit

Breathing bit

Poulice boot.



(Solid leather)

(Wire.)

(Straps)

Horse muzzles.

horse. The hay rack should never be above the manger, for many reasons, such as the great and constant strain caused to the animal's neck, the falling of dust into the corn and into the horse's eyes, and the great waste which invariably results from such an arrangement. Hay lofts immediately over the stable are very objectionable, but cannot always be avoided, but the hay hole should by all means be dispensed with, as it is dangerous for restive horses, frequently spoils the corn and water, and causes the dust to affect the steed. The water is best kept in a small cistern by the side of the manger, so that the horse can help himself. If two horses are kept in the same stall, as is frequently the case with cart horses, the rack should be fixed in the centre and a manger at each end, and on a level, and constructed strictly with a view to promoting comfort and economy.

The head collar rein may be leather and made to buckle with a billett, or a rope may be substituted; chains are not so good. The log must not be heavy, and should be encased so as to slide up and down a wooden tube to and from the ring.

A good groom will not permit the slightest particle of dirt to accumulate in the manger, or dust in the stable or its precincts; rising early every morning he will commence his duties, with a cheerful good will, at one systematic time, say—5-30 in the summer, and 6-30 in the winter.

Cats, dogs, goats, or pigs should not be allowed in the stable at any time.

That the groom should be even tempered is strictly necessary, if the steed must thrive and do well whilst in his hands.

In grooming, a certain time should be laid down as a rule, and devoted to the horse systematically, supported by a good share of elbow grease. The business of grooming must not be skipped over at any time, but the horse should be thoroughly cleaned from head to croup, —not merely polishing the most conspicuous parts, and slipping over what may pass muster with the inexperienced or careless owner, for it must be borne in mind that the genuine horseman cannot be deceived.

The groom commences first by using curry-comb with great caution. If the horse is long coated the curry-comb may be applied pretty freely, but if the steed be clean coated, thin skinned, and of nervous temperament, very delicate manipulation is essentially necessary, and in fact the comb is dispensed with altogether. Some grooms merely use the curry-comb for the purpose of cleaning and dusting the brush.

The entire art of grooming a horse consists in cleaning the dirt from its hide, whisping, brushing, wiping down with a cloth, combing the mane and tail, sponging the croup, eyes and mouth; examining, picking, and if necessary washing the feet, rubbing the legs and ears, adjusting the head-collar, clothing, and body roller, all of which promptly and quietly, and without the hissing on the part of the groom so frequently to be heard in stables, and which hissing it should be remembered is neither musical to the horse nor healthy to the operator.

The stable requisites are pitch-fork, shovel, broom, manure basket, body brush, water brush, weed or whalebone brush, scraper, mane comb, curry-comb, hoof-picker, chamois leather, compo-brushes, sponges, bucket, corn measure, sieve and server, poultice boot, sponge boot, dusters, bandages, (linen and woollen)

drenching horn, stopping, spoke brush, jack, compo. and harness pastes, whiting, button stick and brush, manger log, rock salt, hay whisp, black oils, Gough's Australasian Hoof Ointment and Embrocation, singeing lamps, (large and small) tubing, hose-piping, trimming comb and scissors, clipping machines, (large and small for body and head) twitch, and a small supply of tow and tar, the great usefulness of which any Vet. will advise, as in checking that common disease known as thrush.

It should be borne in mind that the horse cannot work upon a full belly, hence the necessity for its first feed being given early in the day, and with punctuality,—as much earlier, and certainly not later, than the times set down above.

The quantity of food should be regulated by the judgment of the groom, but the quality should be none other than the best. The horse that is worked hard requires more food than the one that has little work, and the number of feeds and quantities given should be in accordance with the work, size, build, and stamina of the horse. One peck of good, clean, sound oats, a few handfuls of beans, and about ten pounds of sweet hay divided into three or four meals per day is the usual quantity for the average hack. A little cut hay or chaff will cause the horse to masticate his food, and take more time over it; and this is very desirable, it being a well known fact that corn that is greedily bolted loses half its nutrition. A handful of bran gives the feed a wholesome fragrance, and a little water flavoured with salt and sprinkled over the hay makes it exceedingly palatable. A lump of rock salt in the manger is decidedly wholesome, and is calculated to find good occupation for the horse, and will at the same time tend greatly to prevent crib-biting.

The general quantity of water, if the permanent cistern be not adopted, is half a bucket three times per day. The horse should be exercised on idle days for at least two hours, during which time the stable should be washed out and thoroughly cleaned, the wet straw taken away—but by no means should it be pushed under the manger—and a little dry litter left and spread under the horse for it to stand upon.

As a vegetable food carrots are greatly relished by the horse, and are considered wholesome, but must be particularly cleaned, and are usually sliced.

The test for oats is that they should be old, heavy, sweet, perfectly dry, plump, and a bright colour. If beans are given they are best bruised. It is usual to water the horse after dressing it. New hay is not calculated to improve the working condition of the horse.

The following is a safe cooling lotion for over-heated backs on reaching the stable after a journey :—4 drachms sugar of lead to a wine bottle full of spring water.

The groom should never be allowed to physic or bleed the animal under his care ; if anything of the sort is thought necessary, the services of the veterinary surgeon should be immediately obtained.

Great care is necessary in working horses that have been brought up fresh from grass, and special attention should be paid to grooming them. It should be remembered that a well groomed horse is always more buoyant and healthy than those that are comparatively neglected or never thoroughly cleaned. Good grooming is half corn, and waste or over generosity should be discouraged. The cratch should never be crammed with hay, or the oats unmeasured and thrown recklessly into the manger. The quantity of food should be calculated and measured

out, in strict accordance with the clean manner in which it is eaten up.

Beware of amateur horse doctors and the groom or stable man with his head crammed full of useless and dangerous receipts and experiments, or as he would term them "faquements," in addition to his wonderful ball prescriptions, (which are a special family secret.)

The waggon horse, carrier's horse, cab horse, or boat horse should never be sent out without the nose-bag or nose-tin, and spare cloths or waterproof sheets that will cover the whole body and strap on against the wind while standing still or not in motion.

Whole corn, coarse hay, irregular feeding, and careless treatment is frequently the cause of indigestion in the horse, or chronic colic as it is called.

The corn should be kept under lock and key near the stable, and proper shelves and drawers should be fitted for brushes and general tools, and kept clean and handy for use; the fork, shovel, &c., should be kept outside the stable.

Some judgment should be brought to bear in feeding working horses at holiday times; the measure of bran should prevail.

Singeing and clipping should be performed with great caution, and by no means hurriedly, and none but the very best machines* used, and by steady, sober men only.

The clothing of the horse demands immediate attention after clipping and singeing. It is a well known fact—and illustrations may often be seen—that the horse is literally smothered with sheet after sheet of clothing and rugs for the first exercise after clipping, and remain

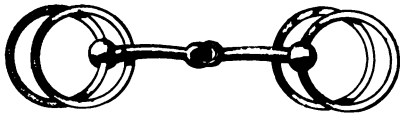
* "The Newmarket and Toilet Clipper."

so for days in the stable, but after a time it is left in the open air in snow or rain, or perhaps a biting frost, altogether unprotected from the elements, which contrasts strongly when the driver appears muffled, coated and gloved up, and his last innocent thoughts being the poor horse; but a sharp trot is expected, to warm the animal, which has to be pulled up again for another starving spell during the anxious transaction of the owner's business. It cannot be said that any man would, or could, wilfully neglect his faithful companion as above shown, but it is the result of sheer want of thought, or carelessness, which is equally blameable; the same man will be most particular in stopping every crevice and hole in the stable on returning home, to (as he thinks) prevent draughts, whereas he is excluding the air that is necessary to the preservation of the health and life of the horse.

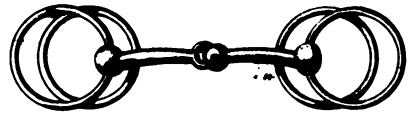
The clothing sheet proper (say the Newmarket) should reach within about 9 or 10 inches of the croup, and be made to fit easily and nicely round the neck, and should be duly strengthened at the chine, and double at the wearing parts. If a horse be overloaded with clothing in the stable, he is much more susceptible to cold outside, in fact everything connected with the "Turn Out" depends more or less upon the discretion and judgment of the owner. Most stables have different systems, and in many cases they will be found admirably adapted to their individual surroundings.

The body roller and circingle are an important part of the clothing suit, and like the head-collar should never be buckled tight; knee caps are useful for exercising valuable horses, but are not considered any improvement to the appearance of the "Turn Out."

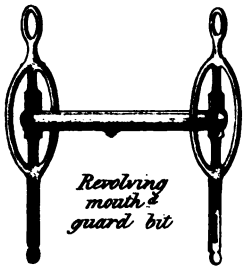
The shoes demand the regular attention of the groom, and the feet should be carefully examined every



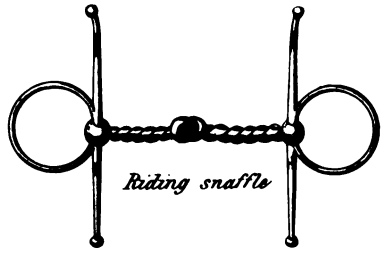
Flat ring.d Wilson snaffle



Round ring.d Wilson snaffle

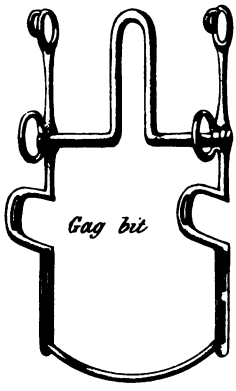


Revolving mouth.d guard bit



Riding snaffle

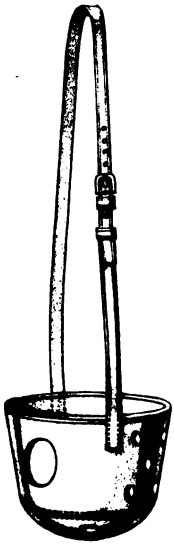
Liverpool loose mouth.d guard bit.



Gag bit

Breathing bit

Poultice boot.



(Solid leather)

(Wire)

(Straps)

Horse muzzles.

the celebrated horseman of old, said :—" The first part of the horse to look at is the foot, for no matter how beautiful the upper house is decorated, all is failure if the foundation be not secure." The Arabs seldom have the hind feet of their horses shod, which is likewise the rule in many parts of Germany.

The stable should by no means be damp, and it is strictly necessary that the harness room should be perfectly dry, and kept clean and free from dust. Suitable pegs, harness brackets, cases and drawers, &c., should be properly fitted for each article. A fire place is necessary for drying and warming clothing, and if adjoining the stable, assists ventilation, and is likewise handy for boiling water, and making bran mashes, &c.

The harness room should be liberally supplied with everything for the use of the groom, and all should be strictly kept in order, in fact, the stableman's motto should be—" A place for everything, and everything in its place."

The author has recently introduced a new Saddle Stand, which is considered a decided improvement upon the old-fashioned and awkward saddle horse which has been the cause of so many broken trees from being tipped over on to the floor. The new stand combines the necessary drawers for girths, bridles, extra stirrup leathers, silk cords, thongs, &c., takes up very little space, and being upon four invisible wheels can be moved to any part of the room, is strong enough to hold any quantity of saddles, keeps the flaps in proper position throughout; the original advantage being that the top is made the same form and size of a hackney saddle, and of reasonable height, so that a gentleman can cross it and try the easy seat and fit of a new purchase without girths, thus saving

time and inconvenience; and it is particularly adapted for saddlers' shops, for shewing saddles off to the best and safest advantage, a model of which may be seen at the writer's establishment, supporting the "original self-coloured saddle," as exhibited by him at the Birmingham Horse Show in 1871–72.

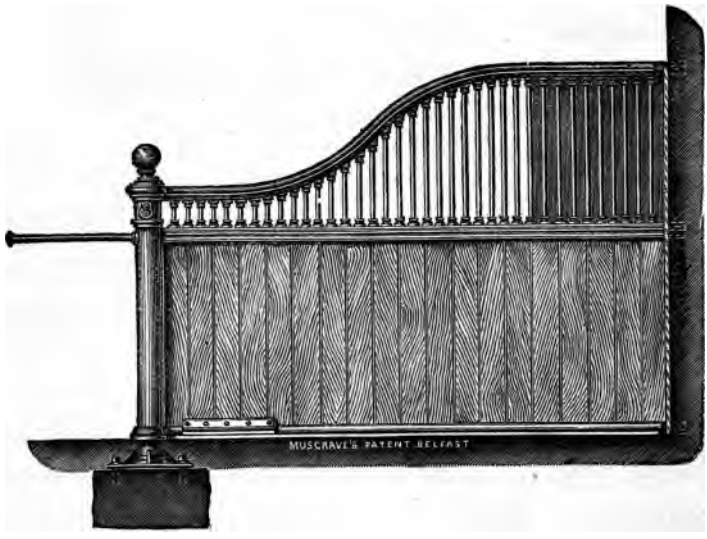
It may be well to give a few general instructions with reference to the selection of fittings for the stable. In the first place, the author would remark that owing to the perfection to which iron fittings are now brought, they are certainly the best. They are made with the mash trough, &c., enamelled inside, so that it can be kept as clean as a china basin, the iron fittings being almost indestructible wake really durable work, while neither the kicking nor biting of vicious horses can have the least effect on them. The crib biter is also deprived of his solitary enjoyment, as with properly formed iron work he cannot lay hold of it with his teeth. A great difference of opinion seems to exist with reference to the suitability of stalls and loose boxes for general use, and it would be impossible to lay down an universal rule applicable in all cases, but it will be sufficient to say that there is no place where the tired hunter so soon recovers his wonted energies as in a comfortable box. This is not at all times available, as owing to limited space in stables, especially in towns, it is found difficult to accomodate the requisite number of horses in boxes.

The length of a stable, divided into 12 feet spaces, will show the number of loose boxes that can be put in it, while if divided into 6 feet spaces it will show about the number of stalls that can be erected.

In dividing the stable into stalls, the use of open railing between the horses is strongly recommended—they

being of a very social disposition, greatly relish the companionship of their stable associates; and often a horse has been known to go down seriously in condition when removed from his companions to a separate place.

In giving an illustration of a division which is manufactured by Messrs. Musgrave & Co., Limited, of 97, New Bond Street, London, and Belfast, as it contains some important practical ideas which have been introduced and patented by them, the author thinks it right to describe them to his readers.



The panel between the horses is wrought iron open railing, such as is advocated above, but with this important improvement, that although the general appearance presented is that of an entirely open panel, that part of it which comes between the mangers at the head wall is made close, so that the horses cannot see each other while engaged with their food; this is considered essential. The other point to which attention should be directed is the Sliding Barrier, or Pole, which draws out

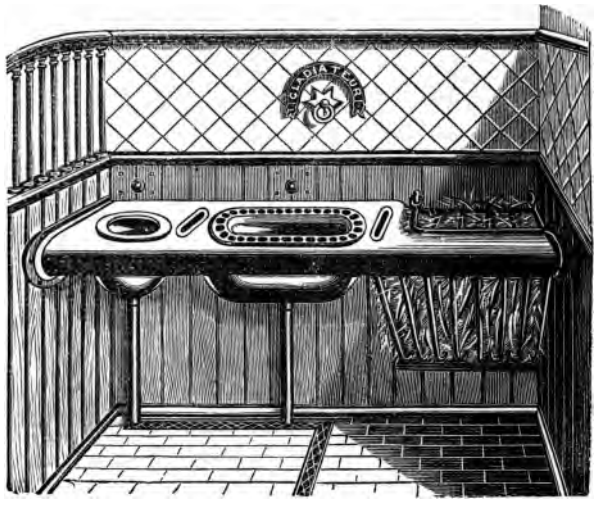
from the division, and crossing the gangway enters a socket in the opposite wall. Should a horse, therefore, break loose at night or during the absence of the men, his opportunity for mischief is confined to his own stall. Several of these barriers can be fitted to each division. These divisions are often made hinged, so that when fitted inside a loose box the latter may be used as two stalls or one box, as occasion requires. This is an extremely useful plan for country establishments, where, on the arrival of friends to attend a "meet," or any similar gathering, the stable accommodation may be doubled by opening out these hinged divisions, which can be effected in a few minutes.

When dividing the stable into loose boxes, the divisions, doors, &c., should be constructed of great strength, as the horse being free to wander about and do pretty much as he likes inside, every part is exposed to his kicking.

The railings and doors should be of wrought iron, and Messrs. Musgrave manufacture in this way some very handsome designs for loose box enclosure.

The Manger fittings should be carefully selected to suit the requirements of the horses and the sort of food they are likely to be fed on. For instance—carriage horses and hunters not consuming a large amount of hay or mash or chaff, will not require an extensive rack or mash trough; but as they frequently stand for days in the stall they might have the addition of a water pot for a constant water supply. Of this however more afterwards. If a few work horses be kept, their racks and troughs should be large, and in the case of heavy dray horses that are often fed on "chop" the trough should be much larger. This subject has been very fully entered

into by the firm above named, who publish a book of designs, having above fifty different kinds of mangers and racks suitable for every purpose.



The construction of the troughs should be such that although the horse should get free access to his food he should not be allowed to toss it out—the hayrack we prefer to be on a level with the manger instead of being raised above the horse's head, but this being a subject on which there is great difference of opinion, the writer approaches it with some diffidence. Both plans have their strong advocates, but he is disposed to look at it from the most natural point he can, viz :—the manner in which the horse was by nature formed to take his food. Had his food supply been placed for him in the fields, as is often the case in stables at a distance of six feet above the ground, we should see at once that the raised or elevated rack was the proper thing for him ; but as his nourishment was altogether provided on the ground, we must try and accommodate him in a similar manner by placing his rack and manger as near the ground as cleanliness and his own safety will allow. This is found by experience to be from three, to three and a half-feet.

The advocates of elevated racks object to the other kind because of the waste which may occur through the horse pulling the hay out, and scattering it over the floor; but Messrs. Musgrave have overcome this difficulty in a manner as practical and effective as it is simple. A plain wrought iron sliding grid which works up and down and is attached to the wall, is dropped on the top of the hay in the rack, and as the horse consumes the hay the grid gradually descends to the bottom.

The subject of water-troughs or no water-troughs has been debated among stable men for many years without much practical result, both sides of the question having its adherents, and, in fact, it may be fairly left to the proprietors decision in each case. Some horses, like men, cannot be trusted with a constant supply of liquid and this has given force to the remarks of those who object to the plan, but it is unfair to deprive the well conducted and sagacious animal of what must be a great comfort to him, simply because his more bibulous neighbour does not know how to conduct himself properly.

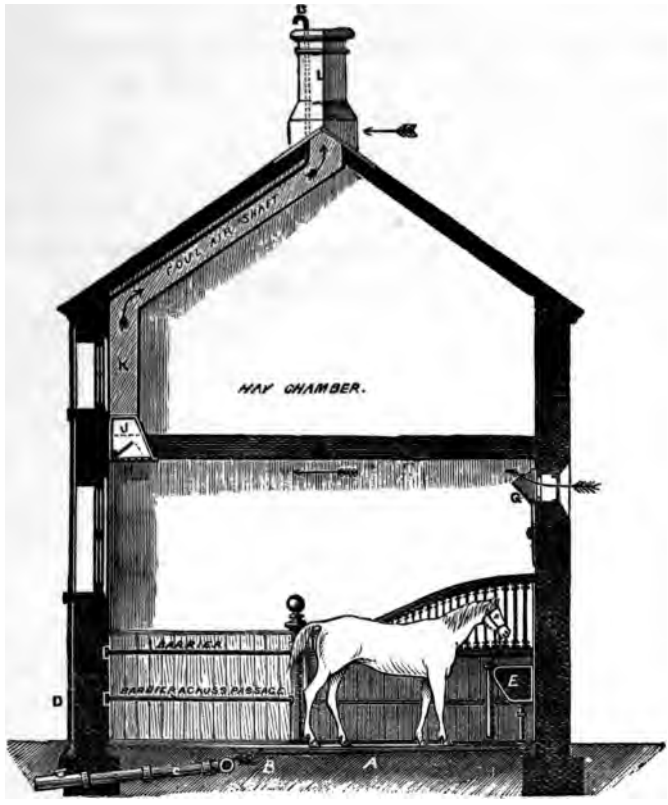
If all the stalls and boxes were provided with water-troughs the horses could have a constant supply left with them or not as may be found to suit their health or habits. Messrs. Musgrave and Co., have a very simple and beautiful arrangement of water troughs, which sits firmly and securely in the manger top-plate, but which tips over with the greatest ease when required to be emptied.

The advantages of this plan are obvious;—the entire body of water is discharged at once into the drain, and is very useful for flushing purposes. The trough has no opening in the bottom to let off the water, but is perfectly smooth; there is no necessity for a plug and washer, or tap, which are annoying to the horse, and

certain to get out of order. The water when discharged descends quickly into the surface drain or gutter, and thence to the sewer through a stench trap; and this brings us to a most important part of the fitting up of the stable, viz :—the drainage and ventilation. Matters which concern the health of the horse so much, require the most careful consideration, and upon which subject the author would make a few additional observations.

Gutters for surface drainage are made of two kinds, viz :—open channels, and closed or covered gutters. The former are much liked on account of being very easily cleaned out, but as the straw bedding gets trampled into the channel by the horse, it becomes saturated with urine, and then not only stops the flow of the urine, but emits a large amount of ammoniacal gas and damp into the stable. Closed or covered gutters avoid this unpleasantness, and are certainly the best, provided ordinary cleanliness is followed, but as many stable attendants are very careless on this head, and the cover prevents the master's eye catching the objectionable dirt, the advantages and merits of the covered gutter are frustrated. Lately, however, Messrs. Musgrave & Co. have got over this difficulty by bringing out a new form of gutter, grooved or fluted on the surface, which allows the urine to flow away along the bottom of the grooves, while the horse stands, and the bedding lies on the top. This is an ingenious and simple method of getting over the difficulty, and is eminently satisfactory in working.

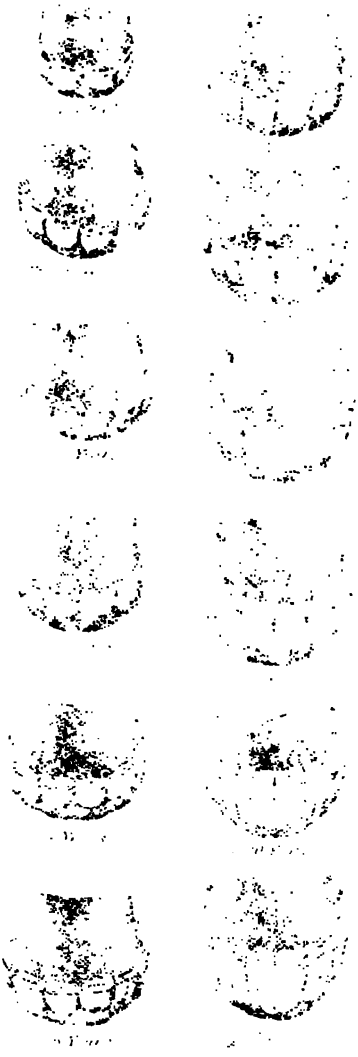
No definite rule can be laid down for ventilation, as every stable has its own peculiarities of site, but in stables arranged in the usual manner the principles of ventilation by Musgrave's Patent Ventilators, shown by the annexed sketch, will be found to keep the air of the stable always pure.

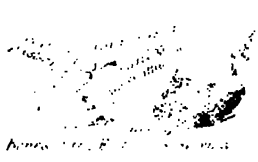


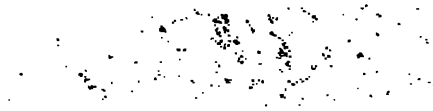
The foul air escapes through an outlet ventilator H, in the ceiling (one opposite to each inlet ventilator), placed close to the back wall, thence into a horizontal air flue J, which runs along the floor of the hay chamber, to collect the air from all the outlet ventilators, and finally passes out at the roof through a large vertical shaft K, terminating in a roof ventilator L, so constructed that the action of the wind always causes an upward current in the shaft. The vertical shaft may rise from any part of the horizontal one, and it enables the ventilator to be placed in the centre of the roof, or, for a large building, two or more may be used and spaced at any intervals required for architectural effect.

The advantages of this system will now be seen. The fresh air enters near the ceiling by the inlet ventilator G, driving before it the breathed air from the horses, which passes out directly at the roof, but no cold air can fall upon the horse either from the inlet or outlet opening. Even on a close summer day there will be a sensible change of air in a stable thus ventilated, because a slight upward current is induced by the roof ventilator in the calmest weather, and the heated breath from the horses will of itself pass away so long as it is guarded against a down draught.

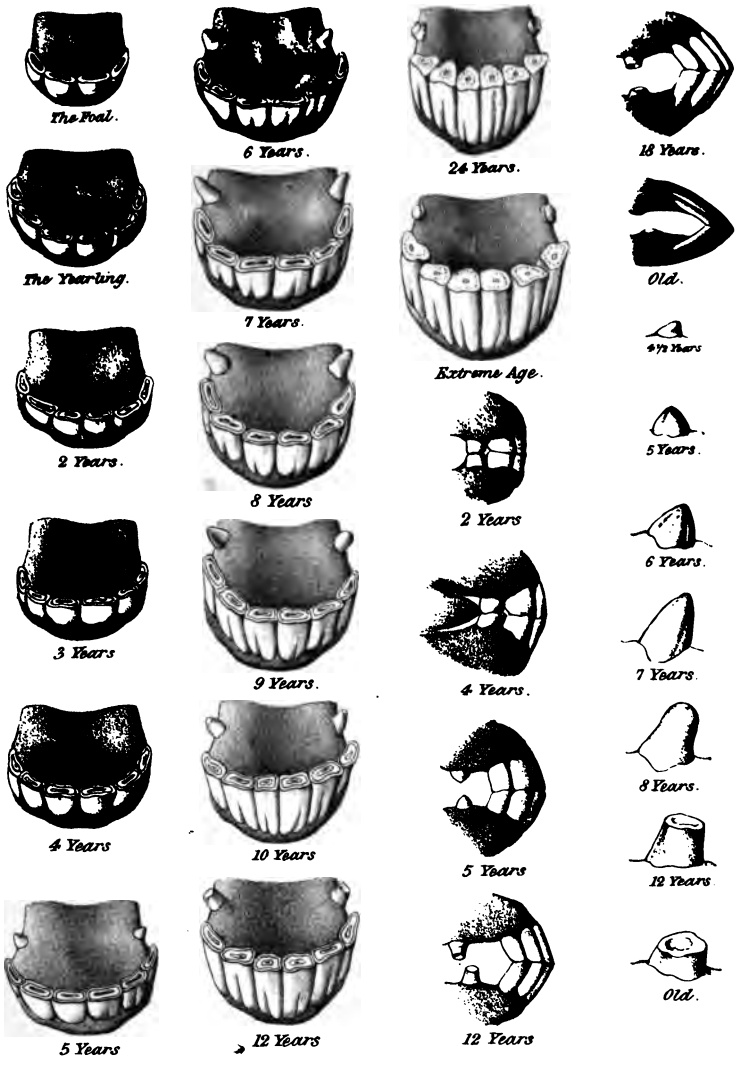
The paving should be hard and durable but not porous. A good test for paving material—let it be brick, clinker, asphalte, or concrete—is to take a portion of it, and after carefully weighing it, leave it in a pail of water for 24 hours and then weigh again. It will be manifest that the pavement which absorbs least will, *cæteris paribus*, make the best floor; but hardness and sufficient roughness, to prevent the horses slipping, are seldom to be found in one article, and therefore the paving bricks are usually made with grooved surfaces.



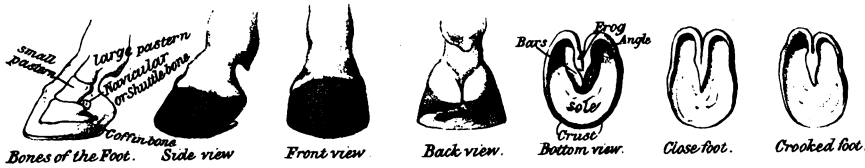




THE TEETH.



THE FEET.



DOCKING AND NICKING.

"He jests at scars that never felt a wound."

The above are very cruel operations, and at a not very remote period were almost universally practised, but of late years, regular feeding and kind treatment have been found to be excellent substitutes, as they cause the horse to carry his tail to the general satisfaction.*

Docking is nothing more nor less than cutting off the horse's tail, and is often attended with danger. The operation is performed safest by a professional man, who uses an engine or machine made for the purpose. After the tail is taken off the raw stump is seared with a hot iron to stop the bleeding, and the part is powdered with resin, likewise touched with a hot iron, to melt and run it over the wound. This is the general process of docking, and the operation is attended with the greatest risk when it is performed by a careless, unskilful, and unfeeling operator, especially if the horse is fat or fleshy, who cuts or chops the tail off too near the rump.

Nicking means cutting four or five gashes across the under side of the tail, for the purpose of giving the horse an elegant appearance by causing the tail to curve. The first nick (as it is called) is started a few inches (say three) from the rump, and the others at equal distances according to the length of the tail. The most cruel part of the operation consists in taking a portion of the tendons out of the tail. The amount of pain that the horse en-

* See "Crupper Dock," in article "Fitting the Harness."

dures during the process of docking and nicking, rests more or less with the operator; but there are many proprietors of horses now who have feelingly determined to set their faces against the system altogether; in fact, the very cruel and unnecessary practice is fast dying out, and is happily the exception and not the rule.

CART, FARM, AND PIT GEARS; SHOEING AND ROUGHING.

"As easy as an old shoe."

The above adage does not at all times apply to the make or fit of the heavier class of harness; yet the very fact of the extraordinary weight of leather, wood, straw, and iron that some horses are condemned to carry, (independent of the loaded cart or waggon) is sufficient of itself to suggest that every part of the set of gears, whether shafter or leader, pit or plough, should at least be a perfect and easy fit.

It will be plain to every considerate mind that each horse should be measured for his suit; but even this is not sufficient in itself to ensure the comfort of the horse and the security of the team, without proper judgment on the part of the saddler in each particular case, and the discretion of the horse owner as to the make and form he has decided upon having.

It is, and long has been, the author's opinion that cart gears generally are made up far heavier and more lumbersome than is necessary, and he considers the example set by London carriers generally, Pickford's, Sutton's, and Railway Companies in particular, a step in the right direction towards bringing about a complete alteration throughout the country, and revolutionise in favour of less weight, not only for the horse's back, but, in fact, all over his body, and in the future (it is to be hoped) the large housings, savers, and winkers of the present day, to a certain extent still adhered to by the country saddler, will

be things of the past. The breech-band is of necessity required to be strong and specially safe, but the writer is of opinion that there is not the slightest necessity for a 5-inch breech-band, or crupper, or back-band, whether shaft or chain, in any case; and contends that breech-bands $3\frac{1}{2}$ and 4-inches wide are strong enough, if well made and stitched by hand with strong threads, a small awl used, and plenty of wax, particularly if after the first row is sewn a strong filling of solid mill banding, (either old or new), be inserted under the lay, and with the ends of the lay carried round the ironwork. The stitching should be four straight rows or slight waves; fancy work such as diamonds, points, or crosses in stitching are calculated to cut and weaken the leather, and will at-times break off, or through, at those particular fillagree patterns. The piece or pieces of leather above referred to as filling are better if old, but must be sound and free from cracks. It is not necessary to pare or shave down the edges for rounding, but simply wetting and hammering flat each side before inserting between the top lay and breech-band body is sufficient. The shaft-crupper, belly-band, and cheeks of the bridle should be made on the same principle; the housings of the saddle and collar are better glued together when lined, instead of being pasted. The firmness of a set thus built will be beyond all comparison with the wide flimsily made old pattern set. All the stitching should be carefully rubbed down at the bottom side, and if the top is hammered it should be done very lightly, and only for the purpose of rounding the work off after wetting; if the mark of the face of the hammer is left it indicates hurried or careless workmanship.

The manner in which the shaft horse is sometimes forced down hill, plainly indicates the necessity for a safe breech-band and hip straps.

The most important part of the cart-set, for the comfort of the horse, is the collar, and the only portion of it that can be reduced in weight is the housing. The old fashioned monster housings never ought to be revived, and the writer thinks they can never be forgotten.

It is extremely important that the collar be lined with best check, and faced between the straw and the check with good clean wool, and the shape of the collar fitted exactly to the form of the horse's neck. Open topped collars must be strapped perfectly tight, in fact the top strap in all open topped collars, whether for use on the surface or under-ground, should only be punched one hole; this will ensure the shape and firmness of the collar being kept as much as possible.

A cruel practice has been known to be indulged in for the purpose of showing a cheap job in repairing,—but it is done at the expense of the horse,—that is simply covering the old and dirty lining with new check, and passing the same off for re-bodying and fresh strawing and wooling, when at the same time the old filling has neither been disturbed nor renewed in any way. Such disgraceful workmanship is nothing more nor less than a wicked robbery to the customer and torture for the horse, and would not be permitted in the workshop of any respectable and conscientious saddler; but it is a well known fact that, in addition to the above, nails and tacks have been substituted for stitches by the unprincipled and cheap contractor, and when it has become an absolute necessity for re-wooling, the very cheapest, knotty, and dirty flocks have been used, without the slightest consideration for the horse or the reputation of the contractor, who seems to think of nothing but what will answer his immediate purpose.

In easing cart (or any other) collars, holes should by no means be cut into them, but the lining opened at the side piece, turned back, and thus hollowed, as marked, where the wound lies and made to miss the tender parts, faced with clean wool, and quilted down particularly in a cart collar or saddle; but if leather lined, as in stage or harness collars, the part, after easing out, simply requires a wet sponge rubbed over the leather and slightly malleted, and it will then lie in the form desired. The saddle tree should be made sufficiently wide to allow the pad to fit (and not stand up or pinch) the back. There is no real necessity for the housings and savors to be large or heavily lined, and if ornaments or plates are desired, the smaller they are the more neat and tasteful they will appear, besides being lighter for the horse to carry.

Double girths are at all times necessary, and should not be supplied less than 1½-inches wide for an average sized horse.

It is important that the belly-band should be the same strength as the breech-band, and that all the ironwork throughout the set be perfectly sound, well made, and of best material.

The foregoing rule as to substance and workmanship applies particularly to cart, farm, pit, and boat gears, the making or repairing of which should not be done "slop," or in a careless and common way, for the sake of price or other ulterior motives, but in the best and most efficient manner possible; as this class of harness is constantly exposed to the roughest possible wear and tear in all weathers and almost all atmospheres, and is generally worn by strong and well corned animals.

If it is the farmer's rule to have the gears repaired upon his premises, about once a year, none but good,

practical, and sober workmen should represent the saddler; more mischief has been caused to the horse's back and the good name of the tradesman through complaints, justified too frequently by the carelessness, drunkenness, or idleness of the journeyman, than is pleasant to either the customer or the trade. Frequently the man is dissatisfied with the food and the quantity or quality of beer supplied him, or complaints are made by the farmer of his horses being injured through bad workmanship, and no wonder, for cases have occurred in which the hand-iron or other tools have been stuffed with the wool into the lining by the careless workman. If it is mutually understood that food and refreshments shall be supplied by the farmer, the quality should by all means be good, and the quantity regulated according to the ability of the workman and the hours of labour. This alone will command a fair day's work, reasonable charges, and no complaints on either side.

Pit-gears require an equal amount of care in making, or repairing, and a good selection of material at all times. The argument that they are going underground and out of sight does not alter the fact that the horses in the mines are, in many cases, as massive and good looking, and undoubtedly are as well fed, and in many cases better cared for, than the average horses above ground, therefore it is really necessary that none but the best leather, check, wool, laces, and ironwork, be used in the making up and repairing all gears used underground.

The split crupper and hip straps used for boating purposes should likewise be firm and carefully made, the side pipes true, and the collar bodies full and easy in the draught. The housing should not be fixed upon the collar to stand up, but to lie as flat as possible for the

purpose of missing the bridges when passing under them, and covering the horse's chine; the hames should be shorter in the top than the ordinary cart hames for the same reason, as regards the roofing.

The boat bridle is not required to be heavy, in fact, the lighter the better, and with a narrow noseband. Boatmen as a rule take great pains with the horses entrusted to their care; the writer has frequently heard boatmen speak of the horse as their most constant and only companion, which is easily accounted for when the fact of their long and solitary journeys together are considered. On questioning a driver, who was jocularly shouting to his horse, upon one occasion, as to why he had forgotten his whip, the answer was—"My hoss wants no whip, I carries my pipe instead, and keeps the whip in the manger."

Nose-tins and nose-bags should be made with judgment, and as light as possible consistent with their use; the bottom of the bag should be solid leather, and the sides (or top) porous, for ventilation.

The Liverpool heavy harness is, as a whole, far above the average in make and quality, and the care bestowed on it to keep it and the horse clean and in good condition is extremely creditable to the draymen, which system must be a source of great satisfaction to the horse owners, who are very proud of, and are known to pay long prices for their steeds.

The general system adopted by the Midland Railway Company in permanently dispensing with winkers to the bridles throughout the whole system, is a very humane act, and truly laudable, being less weight for the horse to carry, and gives him every opportunity of seeing his

way, and it likewise means economy in the first cost and the after repairs.

In the saddlery trade the repairing department is a very important one, and should command the special attention of both mechanic and principal. Good workmanship, with economical views as to cost and promptitude, should be the constant effort. Men without reason and fore-thought have been found in all businesses, but the man that would substitute nails for stitches—where sewing is absolutely recognised as the only legitimate end—is not a fit associate for good workmen. The author has, in his valuation travels and engagements, heard of serious results that have arisen from carelessly executed or bad workmanship. If steady, honest, and sober journeymen could be guaranteed to employers, they would be stimulated and encouraged to pay good wages for a reasonable amount of work; and it is very desirable that workmen, without distinction being made, should prove themselves conscious of doing justice both to employers and their customers.

Nothing is so distasteful to a lady or gentleman on entering an establishment where the proprietor—from want of convenience, or a desire to have his work-people under his personal supervision—his operatives occupying his front shop—to be ogled, quizzed, or questioned by some "irresponsible," who, in the absence of the principal, takes upon himself the responsibility of interrogator, and who, in all probability, is a man fresh from the road, with ideas of cleanliness which never extend beyond clean linen, and a visit to the barber's shop once a week, though more frequent shaving might be necessary; or the interrogator may be a man under notice to leave, and not at all desirous of promoting his employer's interest, con-

sequently he takes no pains to please the customers, but endeavours to make the reception as unpleasant as possible by dropping, or rather throwing, his clams, with the lumbering breech-band between, as heavily as he can, instead of placing it quietly down as he ought and would do under other circumstances; and as justification for this rudeness the man gets up from his stool and pretends to make a thread, when suddenly he becomes afflicted with a very obstinate cough or chronic asthma, and discovers he has lost his handkerchief. The customer may pop in just at the fag end of a not very elevating argument between the above and his shopmates, to terminate which the dye-mop has been known to perform sundry evolutions in the air, and land or rebound in close proximity to the visitor. Suddenly the errand boy may remember that he has been ordered some time ago to hammer the lead, and operates with all his might (for a few seconds) accordingly.

Such are a few, and only a few, of the disadvantages to both customers and proprietors, through converting the front into a workshop. If it can be by any means managed, or in other words adapted to the premises, no matter how small the staff, the manufactory should be away from the entrance or reception room, (which the front shop really is) and either at the back of the premises or anywhere as near at hand as possible, but out of (immediate) sight and hearing, and under the superintendence of a reliable and conscientious foreman, who should be provided with his desk, time book, clock, proper rails for coats and hats, memorandum or order book for entering work at once upon its arrival, (without trusting to memory) and the day book for final noting at completion of the jobs, which books should be handed to the principal every evening for charges to be added,

&c., in fact, system and order should prevail, which, with the occasional lime-washing of the walls, will complete the healthy arrangement, and will greatly contribute to the permanent pleasure of the employés, and cause them to wear the happy and satisfied expression so much calculated to conduce to the comfort (or ease of mind) of the employer, and the ultimate satisfaction of the customer.

In contracting to keep gears and harness in repair all the year round, no matter whether the work is done on or off the premises, the best and cheapest way in the end is that the workmen should be instructed to do every job as well and promptly as possible. The old saying—"Once well done is twice done," strictly applies to the contract department, and is generally acknowledged by the trade; and the author has no hesitation in saying that his experiences among business men lead to the firm conviction that no profession, trade, or calling requires more care or thought; but as a rule, where the work is well and properly done, no tradesman is more successful in giving good value to his clients or customers than the saddlery and harness manufacturer.

Under the title of "Stable and Stable Fittings, &c." the subject of Shoeing and Roughing has been noticed and illustrated; still, in closing this article on "Cart, Farm, and Pit Gears," it may not be out of place to state that what is there set forth in reference to saddle and carriage horses is equally applicable to draught horses, on the feet of which it is highly essential that as much care and attention should be bestowed as upon those of the hackney or hunter; indeed, seeing the heavy loads the waggon horse has to draw, suggests for itself that every means, consistent with efficiency, should be adopted for reducing as much as possible the weight of iron upon his feet, and guarding against his being unskilfully or improperly shod,

and the more so considering the fact that the great weight he has behind him increases his torture when pricked by a carelessly driven nail, and adds to the difficulty of keeping upon his feet in slippery weather, particularly when the roughing is neglected or improperly done; because, in the first instance, the substance of the shoe adds to the pressure upon the nail and forces it into the sensitive part of the foot, while in the latter, when once the animal slips, the weight of the load forces it down, whereas a horse with a light load and safe shoes might, if he stumbled, recover its footing without falling.

The foot-gear of the horse should—as the motto heading these lines expresses it—"Fit as easy as an old shoe," and in the event of its being otherwise, the results to both the animal and the man may be, and oftimes are, serious.

EFFECT OF MUSIC UPON THE HORSE.

"Hark! 'tis the Indian drum."

Everywhere the horse is recognised as the most useful of the servants of man, and it yields in intelligence to the dog alone. In the early ages of the world the horse seems to have been devoted to the purposes of war and pleasure; but its beauty and strength and tractability have now connected it, directly or indirectly, with all the purposes of life. If it differs in different countries in form and size, it is from the influence of climate and cultivation, but otherwise, from the war horse—as it is depicted on the friezes of ancient temples—to the stately charger of Holsten, or from the fleet and beautiful Arabian to the diminutive Shetlander, there is an evident similarity of form and origin. Of course in training the horse for military purposes it is necessary that it should understand the various bugle sounds or calls, and it is astonishing how quickly these are recognised and understood by the horse, who appears never to forget them. It is related that a milkman once stepped from his cart to supply a customer with milk, and just as he did so the bugle of a cavalry regiment that was being drilled in a public park near, sounded, and away bolted the horse, drawing cart and milk cans behind it. In vain the milkman screamed and yelled, and in vain the pedestrians attempted to stop the runaway, but its martial ardour having been inflamed by the well remembered bugle call, it brooked no opposition, and suffered no obstacle to impede its course till it found itself in the ranks of its old com-

panions-in-arms, where its comical appearance, with accoutrements—not exactly according to regulation pattern—excited considerable amusement. On inquiry it was found the horse had formerly been a cavalry one, and hearing the well-known sound to which in former years it had bounded with pride and pleasure, the animal, despite its age, could not resist the enchanting influence of the music. It is known that horses readily understand a few notes of music, but cases can be cited in which they have been trained to keep time to some very complicated compositions.

A few days ago the author had occasion to call upon a friend who takes a great pride in his stud. Just as he arrived his friend and his good lady were about to proceed to the court yard to inspect a new addition to the stable, in the shape of a young colt. It need scarcely be added that the writer gladly accepted an invite to accompany them. The animal—a fine looking creature—was trotted out; but it had never been broken, and had just been shod for the first time that morning, and, like "Fear," it "Startled at the sounds itself had made," and as the metal rang upon the pavement it became quite nervous. The lady seeing this, stepped forward and commenced patting and stroking his mane, and while she was so engaged, a band of music at a short distance struck up a plaintive air, and the lady—quite mechanically—commenced to hum the tune. No sooner did she begin than the colt placed its head upon the lady's breast, when she called her husband's attention and that of the author to the occurence; but the moment she ceased singing the animal raised its head, but replaced it when the singing was repeated. This proceeding, which was done several times, leads one to think that music might be advantageously used in the training of horses, especially those of a sensitive or timid

nature; and we are reminded of tales once heard of the Horse Charmers in Ireland, who were said to be able, by merely humming or singing some words or notes close to the animal's ear, to tame the most vicious or restive horse that could be brought to them.

The author has personally tried several experiments with his own steeds at various times and places, which conclusively prove the theory propounded above, and corroborates the experiences just narrated. For instance, he has on several occasions, while his animal was cantering round the field in which it was turned out to graze, commenced playing upon a miniature cornet, when the animal would suddenly stop and prick up its ears as though listening most attentively to the melodious strains of the instrument; and has also, when the animal—a beautiful bay mare—was in her loose box in the stable, caused the door to be thrown open and at the same time he has opened his sitting room window and commenced playing an air on the pianoforte, when the mare would immediately leave the stable and come trotting and neighing directly to the window whence the sounds emanated, an illustration which goes far to prove that music, which is said to possess "charms to soothe the savage breast," has a wonderful and lasting effect on the equidœ.

The Military Seat.

NATURAL CLEANLINESS OF THE HORSE.

"But he was fastidious as a lord,
And particular about bed and board;
But spirited and docile too,
Whate'er was to be done, would do.

Perhaps no animal is so fastidious about its food and drink as the horse, which is naturally an herbivorous animal; hence its thin and muscular lips, its firm and compressed mouth, and its sharp incisor teeth, are admirably adapted to seizing and cropping the grass; while the peculiar construction of some of the bones of the face enable it to grind down its food as perfectly as it could be ground in the best constructed mill. The olfactory nerve of the horse is more than four times the size of that in man. Hence the horse can detect smells that might escape the notice of man, and an effluvia that did not attract his attention might be a source of great annoyance to the horse. It is a well-known fact that horses will not eat food that has been breathed upon and left in the trough or manger, consequently care should be taken never to pack or put more food in the manger than can be readily disposed of. The horse is as particular about the water it drinks as the food it eats; and it is asserted by some authorities that the quality of the water supplied has a peculiar effect upon the animal. Thus, hard water, freshly drawn from the well causes griping and roughens the coat of the animal. The temperature of the water given to a horse is a matter of very great consequence. Water taken

from a running stream will rarely harm; but if drawn from a well, by its coldness, not unfrequently produces colic, spasm, and even death. The horse that is not properly groomed and carefully stabled soon begins to exhibit the results of inattention; for it becomes dispirited, rejects its food, and loses flesh. So well aware are those who take a pride in their horses of this fact that the utmost care is bestowed upon the ventilation and drainage of modernly constructed stables. A curious case occured recently in Birmingham which clearly illustrates the sensitive nature of the horse and its susceptibility to the effects of effluvia. A manufacturer engaged in the metal trade, but who resides at some distance from the town, owned a very valuable horse, which he kept for the purpose of riding to and from his place of business, where, as he was sometimes detained for hours, he had a stable erected for his horse. He had not long had the animal when it became languid and ultimately unfit for work. A veterinary surgeon was consulted, and for a time he was completely at a loss to account for the symptoms; from which, however, the animal recovered after a short residence at the country house of his owner; but no sooner had it commenced its visits to the town stable than the symptoms returned. The veterinary surgeon was again called in; but this time he paid a visit to the stable, which was in close proximity to a casting shop, the fumes from which reached the stable and was the cause of the animals illness. A new stable was erected in a more healthy part of the works, and the result was most satisfactory.

WONDERFUL HORSES.

"So meekly docile thou art, indeed."

A work like the present would scarcely be complete were it to pass unnoticed some of the fabulous species of the horse tribe. A few years ago there was exhibited in Walsall a very curious animal—one side of which resembled a very finely developed horse, while the other possessed all the characteristics of a cow, even to the cloven hoof, and the rudimentary formation of a horn. Now, as Dr. Gray observes, the horse family is distinguished from all others by its undivided hoof. That this animal was a cross between the horse and a Gnu—which is a species of wild ass, and is called by the Dutch settlers at the Cape the "Bastard Wild Beest"—was considered by some very probable. If so, that would account for the cloven hoof and the horn, as the Gnu has both; but although the cloven hoof and the horn might be accounted for upon that supposition, yet, that could not account for the flank and shoulder, which resembled those of a cow, as the Gnu, although possessed of horns and cloven hoofs, has a body resembling that of the horse. Some of the ancient writers describe a species of horse with a mane extending the whole length of the animal, from head to tail. Some authors have depicted horses with a unicorn-like horn in their forehead, and among the collection made by Aldrovandus, is a horse with a human head and face (Centaur); and another with hands instead of fore feet, which he tells us belonged to Julius Cæsar, and would suffer no one else to mount him. "*Caius Julius Cæsar utebatur equo insigni*

pedibus peope humanis et in modum digitorum ungulis fissis," *&c.*—as a writer in Knight's Cyclopædia very justly observes—this may have only been some malformation of the hoof, like that in the case of the animal exhibited in Walsall; but whether it was only a mere malformation or not, the painter has represented the animal with two human hands, having on each, four fingers and a thumb, and also nails.

WILD HORSES.

"He looked as though the speed of thought
Were in his limbs; but he was wild,
Wild as the deer, and untaught,
With spur and bridle undefiled.
With flowing tail, and flying mane,
Wide nostrils—never stretched by pain,
Mouth bloodless to the bit or rein;
And feet that iron never shod,
And flanks unscarred by spur or rod;
A thousand horse, the wild, the free,
Like waves that follow o'er the sea."

It is very doubtful whether at the present day any truly descendants of an original wild stock of horses exist. Dr. Gray observes that the wild horse, as depicted by Gmelin, very much resembles the ponies left at liberty on the commons of Cornwall, and on the mountains of Scotland, and are rather domestic animals which have become deteriorated. The wild horses of America, although they retain their size and form and have not deteriorated, are the descendants of the domestic horses taken to America by the Spaniards. Horses were first landed at Buenos Ayres in 1537, and that colony having been for a time desserted, the horses were allowed to run wild; in 1580, forty-three years afterwards, they were found wild at the Straits of Magellan. In the Pampos they abound, but these are not descendants of horses that had never been subjugated to man.

HORSEY PHRASES, SLANG TERMS, AND RACY REMARKS.

"Be thou familiar, but by no means vulgar."

In order to render this work as acceptable to all classes of readers and as easily understood as possible; all technical phraseology, cant language, slang terms, or stable expressions have been studiously avoided. As, however, our readers may meet with such terms in other works or in the periodical literature of the day, and may be at a loss to understand their meaning, it has been considered that an exposition of some of the more frequently used terms and phrases may be of service. A selection of these has therefore been made by the author from memory, and such explanations given as will enable anyone to understand their meaning, whether on the turf, in the auction room, or stable.

A Mark—A niny; to take advantage of; good impression; "made his mark."

A Poney of Beer—Small glass.

Bishoper—One skilled in horse dentistry, (but not for the general weal.)

Beaning—Placing a pebble between the shoe and the sole of the foot of the horse.

Crib-biter—Horse that gnaws its manger.

Chipped the bark off—Has been down.

Catch a Weasel Asleep—Off one's guard.

Down in the Mouth—Low spirited.

Dead Nail—A sharper.

Eye Openers—Early drinks.

Ease him—To take the weight off his back; to relieve of money.

Fiver—Bank note.

Faqued up—Doctored with intent.

Fullock—Used in speaking of accidents.

Glums—A deep indention over each eye of the aged horse.

Goer—Very speedy horse.

Goes Freely—Without effort.

Gullett—Passage for food.

Gulp—To swallow eagerly.

Gumption—Shrewdness, understanding.

Gyve—Fetters for legs.

Good Worker—Horse that will pull at anything.

Horse Coper—A dealer in stolen or "picked-up" horses; a buyer of wids, whistlers, roarers, pipers, crib biters; one who gets his money any way he can; and is sometimes known as a "flatcatcher."

Horse Chaunter—Gentleman cheat.

Half-Bull—Half-crown.

Hollow-Backed Horse—Weak spine.

Hush Money—Bribing to secrecy.

Humbug—An impostor.

Horse Power—Expressive of a steam engine.

Horse Leech—A leech that bites horses.

Hitch—Failure or break down; to hitch, fasten, or buckle to.

Hissing—To make sibilant sound.

Hock—The joint between the knee and the fetlock.

Hobby—A strong nag

Hobble—To walk lamely.

Hollowness—Insincerity.

Honest—Upright in dealing; good value.

Hoodwink—To blind; to deceive.

Hoof—The horny part of horses feet.

Hopple—To tie the feet but not closely.

Hoy—To stop; halt.

Hide Bound—Tight skin.

Hernia—A rupture.

Hie—Hasten, hurry up.

High Flier—Lofty carriage.

Hack—Horse for riding or driving.

Hackneyed—Much used.

Heigh-oh—An expression of langour.

He "runs the show"—Finds the money.

High Stepper—Showy.

In Form—Good condition.

Jade—Old and worn out horse.

Jibber—Horse that will not pull.

Kopped—Caught.

Kicked—To stand treat.

Kup-Kup—Come, come.

Look Alive—Be active.

Make-up—Assumed dress.

Monkey—Fifty pounds.

Nice Mouthed—Over choice in eating.

Not in the Hunt—No chance.

Near Side—Left side.

Off Side—Right side.

Off his Feed—Cannot enjoy food.

On Tic—On Credit.

Puffing the Glums—Disguising the glums by perforating the skin with a pin, and blowing up the cavities with air.

Poney—Twenty-five pounds.

Puller—Horse that requires no traces.

Quid—Sovereign.

Rig-Out—Suit of clothes

Rise in the Barometer—Kicked out of the stable.

Spin—Ride of a few miles.

Stayer—Long-winded horse.

Slink—To sneak away.

Snort—To force air through the nose.

Set-up—To complete.

The Rhino—Coin of the realm.

To Crab—Spoil the sale.

That's off—The deal is over.

The Straight Griffin—Direct information.

Tips—To hint or inform.

"*Turn Out*"—Horse, harness, and vehicle.

Turned-up—Sure footed.

Thrape—To thrash.

Tall Talk—Self elevation.

Trot him out—Shew him up.

Wellsher—One who leaves the betting ring to get a biscuit and glass of sherry, and forgets to return to pay his debts.

Wid—A broken-winded horse.

Whistler—Horse that roars, and so termed on account of short wind.

Well-up—Plenty of money; a good mount.

Wants no Whip—Free, easy action.

White Lie—Told as an excuseable falsehood.

Wet both Eyes—Two drinks.

Whoa—Stop, stand.

HORSE SHOWS, AND MAY-DAY CELEBRATIONS.

'Twas morn—a most auspicious one;
From the golden East, the golden sun
Came forth his golden race to run;
  Through clouds of most splendid tinges,
Clouds that lately slept in shade,
But now seem'd made of gold brocade,
  With magnificent golden fringes:
In short 'twas the year's most golden day,
By mortals called the "FIRST OF MAY."

The defenders of horse racing tell us that the so-called sport was instituted with a view to improve the breed of horses; but granting this to be the case, it could only improve them in one direction—that of swiftness. How far the institution has succeeded would be rather difficult to say. But whatever may have been the necessity for fleet horses in those days when the only messengers were the "couriers" and the "carrier pigeons," the necessity for developing swiftness at the expense of other qualities in the horse no longer exist; for the electric telegraph far out-strips the swiftest pigeon, and the express train can distance completely the fleetest steed. Seeing then that swiftness merely is no longer a desideratum in the horse, and seeing also the evils arising from and associated with the "turf," would it not be better to substitute some more rational mode of encouraging the improvement in the breed of horses in their training and management. With a view to carrying out this idea, the author has had an exhibition of draught-horses every May-day, for several years past; and speaking from his own experience

he can safely say the results have been most satisfactory, as the prizes offered have had the effect of inducing the waggoners and carters to bestow more care and attention upon the animals placed under their care; for they have learned the very useful lesson, that if they desire to present their horses in a condition necessary to ensure their taking a prize, they must attend to their animals and groom them regularly and well all the year round, and not merely dress them up for the Show. The author feels confident that if what he has done on a small scale, were carried out in every locality throughout the kingdom upon a larger scale, much good would be accomplished and the breed of horses considerably improved; for when a horse is kindly treated and properly attended to, its temper is improved, and the improvement is transmitted. The author of the "*Russo-Turkish War*," informs us that no people on earth excel the Turks in their tender care and regard for the lower animals, and it is well-known that the Arabs bestow the greatest care upon their horses, and the result is that the horse of the Arab is most docile—indeed so much so—that the children may be seen fondling and playing with them like dogs. The Arab becomes passionately attached to his horse, and the horse to his master. It is related that on one occasion an Arab was taken prisoner and carried to a considerable distance from the encampment of his tribe, and having been bound hand and foot was placed in a tent a short distance from where his steed was picketted with a number of others. During the night the horse, with his teeth, bit the rope with which he was tied, and making its way to where its master lay, bound, it seized the silk scarf or sash which was tied round its body and dashed off across the plain, and never halted till it placed its master safe at his tent, and then fell down exhausted and expired. Such devo-

tion, such affection could not have been developed by the whip or the spur of the jockey, but only by that kind treatment which the author advocates. He is of opinion, if, in addition to the May Shows, prizes were offered for the best kept and most orderly arranged stable, and judges appointed to visit and inspect the stables of the competitors periodically during the year, the owners of horses would find their animals better attended to, and their stables more orderly kept and economically managed. Fully impressed with these views, he seriously appeals to noblemen, gentlemen, agriculturalists, and others, to take this matter up, with a view to something practical being done.

THE FREE REGISTRY SYSTEM.

"Honesty is the best policy."

When the land had become desolated through the Wars of the Roses, and England lay half unpeopled by the feuds of York and Lancaster, labourers were few, and, as a consequence, higher wages were demanded; but the government stepped in and declared the wages of labourers, artificers, and others should be the same as they were before the civil wars; and by the Act of Parliament, 5 Elizabeth, cap. 4, sec. 5, it was enacted:—

> "That the justices of every shire, riding, and liberty, or the more part of them, being then resident within the same, and the sheriff, if he conveniently may, and every mayor and other head officer within any city or town corporate * * * * * shall yearly in Easter Sessions, or within six weeks next after, assemble and call unto them such discreet and grave persons as they shall think meet; and having respect to the plenty or scarcity of the time, and other circumstances, shall have authority to limit and appoint the wages as well of such of the said artificers, handicraftsmen, or any other labourer, servant, or workman whose wages in time past have been by any order or statute rated and appointed, as also the wages of all other labourers, artificers, workmen, or apprentices of husbandry which have not been rated, as they shall think meet by their discretion to be rated, limited or appointed."

By the 6th section of the same act the rate of wages fixed was to be proclaimed, and by the 18 section it was enacted:—

> "That any person giving more wages than that fixed was to be imprisoned for 10 days and to forfeit £5, one half of the penalty to go to the King and one half to the informer. And any person accepting more than the wages fixed, was by the 19th section to be imprisoned for 21 days."

This, then, was the origin of the "Statutes" or hiring fairs, to which all servants repaired annually to be engaged for the ensuing year, and the party hired received a retainer, or hiring fee. This is still done in the enlistment of soldiers, the summoning of witnesses, and in securing the services of council, and did very well when the servants to be hired were few; but after the labour laws were amended and the statutes referred to were repealed, then servants were no longer compelled to remain in their own parish, but moved from place to place; and it became a common thing for unprincipled servants to take hiring fees from different masters and get drunk with the good conduct money Consequently these "mops," "fairs," and "statutes" became such nuisances, that in many places they have been entirely abolished, and those who wish to find good servants never think of going to such places for them.

But the "statutes" being abolished the question comes where are employers to find servants to suit them, and servants employers requiring the labour they have to dispose of? This is one of the difficulties that naturally results during a transition state. The old institution has been swept away, but where is the new and better one to be found? Well, the author, seeing the dilemma in which both masters and servants have been placed by the altered circumstances of the times, has—and he believes successfully—found the desideratum so anxiously desired and so much needed by the public, and that is a Free Registry, where servants can record their wants and employers their requirements, and both can be accommodated without trouble or expense. To illustrate the benefits of a Free Registry to both employers and employés, let us suppose a gentleman wants a groom. Well, he does not know all the localities where grooms

"most do congregate," and if he did he cannot go and question all and sundry as to whether or not they are "out of livery" and wish to don the buttons. But he can call at the Free Registry and state what he requires; and a groom desiring a re-engagement also calls, and the keeper of the Register offices finds by investigation that the groom is just the individual required, and at once takes the necessary steps for securing for him the vacant situation. Here, then, both these parties have been spared loss of time, loss of money, and a vast amount of anxiety, which they would have had but for the Free Registry system, for without it they might never have met, and if they had there might have been delays and questionings that would have resulted in each forming of the other an unfavourable impression, which, even had an engagement taken place, would have marred their mutual respect for one another. But the keeper of the Registry, by procuring all the necessary information, saves both parties the trouble and worry of character hunting and certificate finding. He knows his men and the situations they are qualified to fill,—for the applicants know it will answer their purpose best to be explicit, and therefore communicate freely to him all that it is requisite for him to know, in order to enable him to form a correct estimate of the applicant's talents and abilities; and hence he has no difficulty in putting the right man in the right place.

SADDLERS' SHOPS.

"Completeness—the Secret of Success."

Considering the variety of articles and the diversity of colours to be met with in the Saddlery and Saddlers Ironmongery trade, wonder has often been expressed that saddlers' shops do not present a more attractive appearance. In this respect they seem, as a rule, far behind the age. Of course there are in this, as in every other case, honourable exceptions; but still it must be admitted that generally speaking a saddler's shop presents a very dull contrast to either a draper's or even an ironmonger's establishment. Now why should it be so? The various coloured leathers used in modern saddlery are as bright and lively as are those of the choicest silks; and if displayed to advantage, and interspersed with made-up articles, plated-goods, gold and silver spurs, and ornaments—such as harness mountings, a very pleasing effect would be produced; and where there is room the whole might be rendered more attractive by equestrian models, in military uniforms, riding habits, and hunting costumes. The addition of hand and travelling bags, purses, and other fancy goods would enhance the display, and impart an important feature to the stock. Horse cloths, rugs, and railway wrappers, might also be displayed in a manner that would be attractive; instead of being, as they may some times be seen, piled in a heap like a lot of soiled linen ready for the wash, Drapers know better how to show off their goods to advantage. They have lay figures, on which their dresses, shawls, jackets, and

wraps are artistically and gracefully displayed. Why should not saddlers do the same? For instance, why should not these two lay figures—one representing a lady, the other a gentleman, occupying the compartment of a railway carriage, with their wraps, rugs, and bags, all displayed to the best advantage, as for a journey? Such figures would be an excellent substitute for those live mechanics, sometimes found occupying the principal and prominent positions in saddlers' front shops.

HINTS AND RECEIPTS.

"Profit by experience."

JIBBING is frequently caused by bad driving, or ill-fitting harness, or over-loading.

STUMBLING arises sometimes from having picked up a stone, or weakness and over-work; at all times the blacksmith or vet. should be consulted; rest and bandages are good treatment.

SHYING is often caused by nervousness; the horse should never be thrashed, but coaxed, and gradually brought up to the object shied at.

BITING is sometimes the result of teasing in the stable or general careless treatment, and when once acquired by the horse is seldom, if ever, cured. The muzzle or other protection should be in constant use.

RUNNING AWAY. If it is a known fault, care must be taken respecting the kind or make of bit used. If the habit be acquired by a high-spirited horse it should never be left alone in the street.

KICKING. The kicking horse must be mastered by stratagem; sometimes it arises from playfulness, and sometimes from abuse.

REARING. The rearer should never be struck on the top of the head, but turned round, or leg strapped up.

FOR CANKER IN THE MOUTH use a weak solution of lemon.

FOR BLAIN. Veterinary surgeons lance freely and deeply, and administer aperient medicines.

Barbs or Paps should never be touched by any instrument; cooling medicine removes them.

Lampas. The roof of the mouth may be slightly lanced, or aperient medicine administered, but heated irons should never be applied on account of destroying the sensibility of the mouth.

Spasmodic Colic. The horse should be walked about, friction used to the belly. The advice is—two ounce doses of spirit of turpentine, with an ounce of laudanum and spirit of nitrous æther in warm water or gruel. In the event of the above failing, the animal is bled and warm injections are administered. The long continuation of the spasmodic action is liable to produce entanglement of the bowels, then the case is hopeless.

Worms may be cured by small doses of emetic tartar, or calomel with a little ginger being given to the horse half-an-hour before his first meal, and worked off with linseed oil or aloes.

Catarrh or Cold can be removed by a few mashes and a little medicine.

Scabby Itchiness on the edge of the eyelid is cured by diluted nitrated ointment of mercury.

Warts are cut off with the scissors, and the roots touched with lunar caustic.

Hoof Ointment. The following was given to the author on board the "Australasian" by an old bush-ranger, viz. :—Stockholm, or archangel tar, and mutton suet melted together, to be brushed round the hoof every day.

Surfeit is often caused by indigestion; slight bleeding is servicable—good food is indispensable.

MANGE requires thorough dressing with Barbadoes tar one part and linseed oil two parts, with internal medicines.

GREASE is cured in the first stage by bran, or turnip, or carrot poultices, and moderate physic.

SPLINTS are cured by a simple operation, and sometimes by the application of blister ointments.

SPRAINS require rest and warm fomentations.

OVER-REACH sometimes requires the attention of the blacksmith, and at other times Friar's Balsam will effect a cure.

SORE BACKS AND WITHERS should be promptly attended to with water dressing and poultices; if the wounds are raw and open the animal must have rest.

TO PROTECT WOUNDS FROM THE FLY. Keep the part moist with a rag dipped in a solution of tar.

TO ASSIST THE GROWTH OF HAIR. Hog's lard and mercurial ointment, mixed in equal parts with finely powdered burnt leather, by way of colouring.

TO MAKE GRUEL. 1 lb. oatmeal to a quart of water mixed in a pan to 3 quarts of boiling water, stir on the fire until it thickens, then cool for eating.

TO MAKE A POULTICE. Bran or linseed meal, to be made with boiling water and as hot as can be borne; should be applied to the feet with a leather poultice boot, as seen in the illustration.

VARIETIES OF THE HORSE.

"In truth he was a noble steed,
A Tartar of the Ukraine breed."

The following are the varieties of the horse, and the writers by whom they are mentioned, as given by Dr. Gray in the catalogue of the British Museum :—

The Parameros of Peru	*H. Smith.*
The Tarpan Wild Horse (primeval bay stock)	"
The Andalusian Horse	"
The South American Horse	"
The Mexican and Seminole Horse	"
The Feral Horses of America	"
The English Race Horse	"
The Barb of Morocco	"
The Race of Africa	"
The Persian Race	"
The Toorkee Races	"
The East Indian Races	"
The New Holland Horse	"
The Transylvanian Horse	"
The Moldavian Horse	"
The Greek Horse	"
The Spanish Horse	"
The Villous Horse (primeval of the white stock)	"
The White or Gray Horse	"
The Marengo	"
The Black Horse	"
The English Draught Horse	"
The Dun or Tan Horse	"
The Decussated Horse (or the Eelback Dun Horse of Ukraine)	"
The Myautzee (or the Pied Horse of China)	"
The Bhooteahs Ponies	"
The Pickarrow Ponies	"

The Yaboos or Affghanistan Ponies	*H. Smith.*
The Hungarian Horse (with slit nostrils)	"
The Common Bashkir Horse	"
The Morea Ponies	"
The Swedish and Norwegian Ponies	"
The Shetland Ponies	"
The Galloway	"
The Dartmoor and Exmoor Ponies	"
The Sardinian Wild Horse	"
The Tatto or East Indian Pony	"
The Tangum, Piebald, or Skewbald Horse *(Equus varens)*	"
The Skewbald of Achin (in Sumatra)	"
The Koomrah or Equus Hippargions	"
The Koomrah or Equus Lalisi	"
The Kuda or Saran Horse	"
The Javan Horse	"
The Tambora or Birma Horse	"
Equus antiquorum	*Gener.*
Equus Caballus ...	*Linnans F. Cuvier, Fischer, Gray.*
Equus Equa	*Pling.*
Generous Horse	*Pennant.*
Cheval	*Buffon, Cuvier.*
Pferd	*Redinger.*
Ross	*Schrank.*
The Arabian Horse	*Bewick, Low, Smith.*
The Race Horse	*Bewick, Low.*
The Hunter	*Bewick.*
The Irish Hunter	*Low.*
The Connemara Horse	"
Old English Black Horse	"
The Cleveland Bay Horse	"
The Suffolk Punch	"
The Clydesdale Breed	"
Black Horse	*Bewick.*
Old English Road Horse	"
Common Cart Horse	"
Improved Cart Horse	"
The Bornou	*White.*
Cheval d'Islande-var., Islandicus	*Gaim, Lesson.*
Equus Monogicus	*Lesson.*
Equus Caballus frisius	"

Thibet Horse ... ... *Hodgson.*
Cheval à Port Frisses, E. frissus ... ... *F. Cuvier.*
Tutto, or Maharatto Pony (sedulously propagated in the Deccan, is much used to transport luggage, and is very vicious) ... ... *Sykes.*
Tattoo (a Hack Pony, of Calcutta) ... ... *Hardwick.*
Tangham of China ... ... *Hodson.*
Hubstee of Deo Harmad ... ... "
Tangham of Lhassa ... ... "
Tangham of Gyanche ... ... "
Hippargus ... ... *Oppian.*
Boryes ... ... *Herodotus.*
Bourra of Koldagi ... ... *Rüppell.*
Horse with a curled mustache on the upper lip, of Asiatic Russia ... ... *Falk. Pallas.*
Naked Horse, of a beautiful form, of Asiatic Russia *Pallas.*
The Argamaki, of Bocharia (a white Horse, with very close minute articulated brown spots, of Asiatic Russia) "
The Tangum or Tangham, (primeval Piebald stock of Thibet) *H. Smith.*
Bonaparte's Arab (Marengo) ... ... "
Crisp-haired Horse (primeval of the Black Stock) ... "
Northern African (not gregarious) ... ... "

KEY TO THE "SCREW LOOSE."—*(See Illustration.)*

GROWN aged, used up, and turned out of the shed,
Lame, spavined, and wind-galled, but yet with some blood,
While knowing postilions his pedigree trace,
Say his dam won that sweepstake, his sire won that race;
And what matches *he* won do the ostlers count o'er,
As they loiter their time at some hedge alehouse door;
While the harness sore gall and the spurs his side goad,
And the high mettled racer's a hack on the the road;
Till at length having laboured, toiled early and late
Worn out by degrees, he plods on to his fate.
Blind, old, lean, and feeble, he treads round a mill,
And draws sand 'till the sand of his hour glass stands still.

FROM THE "TAMING OF THE SHREW."—*Shakespeare.*

ACT III., SCENE II.

SHAKESPEARE'S IDEA OF A "SCREW LOOSE."

(See Illustration.)

Biondello. His horse hipped with an old mothy saddle, the stirrups of no kindred: besides possessed with the glanders, and like to mose in the chine; troubled with the lampass, infected with the fashions, (Farcy) full of wind-galls, sped with spavins, raied with the yellows, past cure of the fives (vives, "Strangles,") stark spoilt with the staggers, begnawn with the bots; swayed in the back, and shoulder-shotten; near-legged before (foundered in the fore-feet) and with a half-checked bit, and a head-stall of sheep's leather; which, being restrained to keep him from stumbling, hath been often burst, and now repaired with knots: one girth six times pieced, and a woman's crupper of velure, (velvet) which hath two letters for her name, fairly set down in studs, and here and there pieced with pack-thread.

CONCLUSION.

Everything that has a commencement must have a conclusion—and "Centaur" is no exception to the general rule. Therefore, as the mythical creature, whose name the author has adopted as the title for his book, possesses the head of a man and the extremities of a horse, so this work has its commencement or head, and now comes the conclusion or tail (end). But here the writer, before bringing his work to a close, would add a word or two by way of justification of the peculiar title he has taken for his book.

The "Centaur," like most of the ancient legends, had a deep meaning.

Thus—man by his "humane" treatment of the horse imparts to it a portion of his nature, and the animal becomes so wise that it obeys the will of its rider or groom, as readily as do the members of the human body the impulse of the brain; and in this sense, the horseman

and the horse become one, and the brain of the man becomes, as it were, united to and governs the body of the horse.*

The author wishes it to be clearly and distinctly understood, that he makes no pretension to having exhausted the various subjects brought under consideration in this work. To have done so, would have necessitated writing a volume as large as the present upon each subject. What he aimed at was the production of a book containing, in a condensed form, such information as would serve as a guide, and such instruction as would prove practically useful to owners and managers of horses and vehicles; and also to those about to set up a "turn out;" and he hopes the object he had in view has been attained.

He would also express his indebtedness to those gentlemen who have furnished him with information regarding facts which have come under their personal observation; and which have corroborated the author's experiences and views of the various subjects treated of in "The Centaur."

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*A striking illustration of the power of kindness and companionship upon the horse came under the writer's notice a few days ago. A little boy eight years old was missing from the house of a friend whom the author was visiting in Warwickshire. Search was made, but the child could not be found; at length he was discovered lying in a field beside a young horse, with his arms round (or upon) the animal's neck. Although the child had only been at the place about three weeks, the horse would follow him like a dog whenever he called it, and when they were lying together, if the horse wanted to get up, it always took care to rouse the child by rubbing its nose against the child's face, nor would it rise until it had seen its young companion at a safe distance first, then the animal would roll over, spring trot to the child's side.

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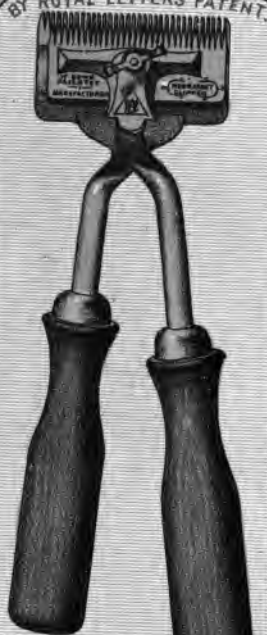

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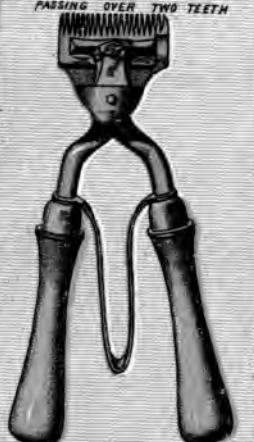

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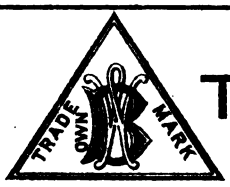

TESTIMONIALS

As to the SUPERIORITY of

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I have thoroughly tested the Newmarket Clipper during two seasons; and I am so satisfied with them that I have requested my own servant, as well as the firm's, to use no other. The men regulate this single screw machine so much easier than those with two or three screws.—Yours truly,

GEORGE CARLESS, M.R.C.V.Sh.,
Pro PERRINS & CARLESS.

LICHFIELD, *26th August, 1877.*

I beg to say that I like the Newmarket Clipper that I had from you better than any other I have had used. The work done by it is certainly equal to any other machine. I find it is more endurable than others, and my grooms say that it is easier to work than any they have used.

I remain, yours, &c.,

R. T. COOPER.

HAGLEY ROAD, CANNON STREET,
BIRMINGHAM, *22nd November, 1877.*

Dear Sir,—We have much pleasure in recommending your Patent Newmarket Horse-Clipper, as doing its work thoroughly well, and quite satisfactorily.

Several of them have been in use in our establishment for two or three seasons, and our men speak very highly of them.—We are, dear Sir, yours truly,

HUNT & PARKER,
Veterinary Surgeons.

MOAT HOUSE,
KERESBY, *7th November, 1877.*

Sir,—I am very much pleased with your Newmarket Clipping Machine. It is simple, but perfect in its construction.

My man, yesterday, clipped a pair of horses with it in about five hours, and I never saw two horses clipped better.—Yours faithfully,

JOHN F. ADAMS.

MR. W. BOWN, 306 Summer Lane, Birmingham.

HORSE REPOSITORY, OXFORD STREET,
BELFAST, *6th December, 1877.*

Sir,—When I was in Newcastle-on-Tyne Fair, some time ago, I purchased a pair of Clipping Machines, called the "Newmarket Clipper." I tried them, and they have turned out the best Clippers I have ever used.—Yours respectfully,

WM. PENTLAND.

---

4 LIVINGSTONE PLACE,
LENNOX STREET, LOZELLS,
BIRMINGHAM, *November 21, 1877.*

MR. W. BOWN.

Sir,—As a professional Horse Clipper, I have used your Patent Newmarket Clipper with very great success.

This season I have clipped upwards of forty horses with one machine, without having it sharpened.

I have used many kinds of Clippers before, but never had any that gave me such satisfaction.

It is very readily taken to pieces, allowing it to be cleaned and well oiled, and put together, fit for work, without any difficulty.—I am, Sir, yours respectfully,

RICHARD A. JONES.

BELLE VUE INN,
ICKNIELD PORT ROAD,
BIRMINGHAM, *November 6, 1877.*

MR. W. BOWN.

Sir,—Being a professional Horse Clipper, I can, with every confidence, recommend your Patent Newmarket Clipper as being superior to any I have previously used.

As a proof of its durability, I have clipped upwards of fifty horses this year with one of them, without being repaired or sharpened in any way.

The time saved in taking your machine to pieces and putting it together is of great importance, and the adjustment is so simple.

I do not intend to use any other machine but your "Newmarket," and shall recommend it wherever I can.—I am, Sir, yours respectfully,

HENRY SWALMON.

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SLIDES & BOMBILLAS,

FOR

SOUTH AMERICA, WEST INDIES, AUSTRALIA,

AND THE HOME MARKETS;

ALSO MAKER OF

BREAST BUCKLES,

FOR CARRIAGE & VAN HARNESS;

PARK STREET,

WALSALL, ENGLAND.

By Royal Letters Patent.

F. EGLINGTON,

INVENTOR,

SOLE PATENTEE, AND MANUFACTURER

OF THE

PATENT QUICK RELEASING HARNESS SHAFT TUG,

PLATED, NICKEL SILVER,

BRASS, AND JAPANNED,

At half the cost, with treble the wear of the ordinary Leather Shaft Tug;

ALSO, THE REGISTERED

"ECONOMY" IRON SHAFT TUG,

The Cheapest, Neatest, and most Durable Tug ever invented.

SUITABLE FOR CABS, CARRIERS, AND MARKET GARDENERS.

ABOUT ONE-THIRD THE COST OF USUAL SHAFT TUGS.

PARK STREET,
WALSALL, ENGLAND.

Brevete du Gouvernement.

F. EGLINGTON,

INVENTEUR,

SEUL BREVETE ET FABRICANT

DES

Boucles de Brancards qui se Debouclent Instantanement,

PLAQUEES, OU ARGENTEES,

EN CUIVRE OU VERNIES,

A moitié prix, et trois fois l'usage des supports de brancards ordinaires;

Aussi, LE REGISTRE

SUPPORT DE BRANCARD ECONOMIQUE EN FER,

Le meilleur marche, le plus simple, et le plus durable, qui ait jamais ete invente.

CONVENABLE POUR CABRIOLETS, CHARRETTES ET AUTRES VOITURES.

A UN TIERS DU PRIX DES SUPPORTS ORDINAIRES.

PARK STREET,
WALSALL, ANGLETERRE.

SAVE YOUR HORSES AND HARNESS

BY USING

KNIFE Versus FACILITY.

EGLINGTON'S

PATENT

"RELEASE"

SHAFT TUGS.

"Economy" Shaft Tug.

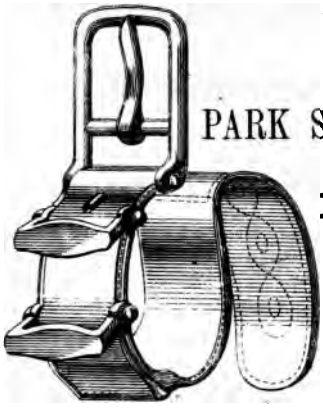
SOLE INVENTOR

OF THE

REGISTERED

"ECONOMY" CAB TUG.

PATENTED IN ENGLAND, BELGIUM, AND AMERICA, U.S.

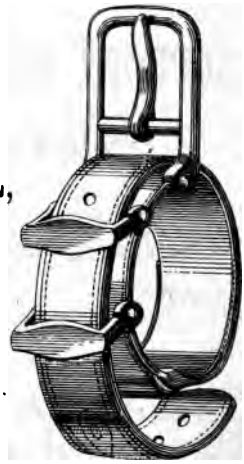


"Release" Harness Tug, Open.

ADDRESS:—

PARK STREET, WALSALL,

ENGLAND.



"Release" Harness Tug, Closed.

THE FOLLOWING ARE A FEW OF THE MANY ADVANTAGES OF

EGLINGTON'S

PATENT QUICK-RELEASING HARNESS TUG

OVER ANY OTHER YET INVENTED.

1.—It is the safest Shaft Tug.
2.—It is the soonest *released* from the shaft in the event of the horse falling down.
3.—It hangs better from the backband, by the peculiar and original formation or pattern of the buckle.
4.—It is the most durable shaft tug in existence.
5.—It cannot get out of order.
6.—It is the most simple in construction.
7.—It is not so unsightly, but an improvement upon the appearance of any other.
8.—It is of the same formation as the ordinary leather tug, but a more perfect shape and model.
9.—It can be adapted to any harness or furniture.
10.—It is more humane towards the horse in its action, and does not necessitate wrapping the backband or bellyband round the shafts, (which causes pain to the horse, and is injurious to the leather work.)
11.—It keeps all strapping OUTSIDE the shafts, without the aid of twists or unsightly bends.
12.—It disposes of the necessity for releasing the traces to prevent the horse's legs getting over the shafts, in recovering itself after falling.
13.—It is the perfection of fit, form, durability, and facility.

Advantages of the ECONOMY Shaft Tugs.

1.—The first cost is the last.
2.—Are the cheapest ever made.
3.—Are less than half the price of the ordinary leather tugs.
4.—Can be adapted to any backband and any furniture.
5.—From the original shape of the buckle, they are better adapted to the harness, and general wear and tear.
6.—Have an extremely neat appearance, and suit any work.
7.—Are a great boon to Cab Proprietors, Carriers, Market Gardeners, &c., and are particularly adapted to every-day use in all weathers.
8.—Are the *perfection of shaft tugs*, and *economy and safety* combined.
9.—All stables and harness rooms should keep an assortment in reserve.
10.—They are made of none but the very best materials.
11.—They are a pronounced success.
12.—Every tug is stamped with the inventor's name.
13.—Cannot be surpassed for cheapness and durability.

ESTABLISHED 1776.

JOSEPH CARVER,

WHOLESALE MANUFACTURER

OF

WHIPS &

NON *VINCERI.*

TRADE MARK.

THONGS

WALSALL.

Whips FOR ALL Markets,

THONGS OF ALL KINDS,

GREEN HIDE GIRTHS,

STEEL & LEATHER WATCH GUARDS,

WALKING STICKS,

DOG LEADS, &c.

F. GREW, LITH. BIRM.

NO MORE DOCKING OR NICKING!

THE "CENTAUR"

VENTILATING

LINSEED HARNESS DOCK,

IS THE MOST

HUMANE, SHOWY, AND EASY

FOR THE HORSE.

CAN BE HAD SINGLY OR BY THE GROSS, ONLY FROM

E. W. GOUGH,

HARNESS MANUFACTURER,

PARK STREET,

WALSALL.

SOMETHING NEW!

THE

"CENTAUR" BIT,

FOR

STOPPING RUNAWAY HORSES,

MANUFACTURED (WHOLESALE) BY

JOHN HAWKINS & Co.,

PRACTICAL BRIDLE BIT,

Stirrup and Spur Manufacturers,

WALSALL

AND

LONDON,

Have been awarded 3 PRIZE MEDALS for excellence of manufacture and finish of BITS, STIRRUPS, and SPURS at the last three Great International Exhibitions, 1851, 1862, and Philadelphia, 1876.

Illustrated Catalogues and Prices on Application.

PATENT OIL.

"MOLLISCORIUM."

(REGISTERED TRADE MARK).

For SOFTENING, PRESERVING, & WATERPROOFING

HARNESS,

REINS, TRACES, SADDLES, BRIDLES, STIRRUP STRAPS, CARRIAGE TOPS, APRONS, &c.

SUPERIOR TO NEATSFOOT & ALL OTHER OILS hitherto used, because—

1.—It will not **SWEAT** or **GUM.**
2.—It readily penetrates the **LEATHER.**
3.—It renders it **WATERPROOF.**
4.—It makes it perfectly **SOFT.**
5.—It prevents it **CRACKING.**
6.—It ensures **DURABILITY.**
7.—**HARNESS** can be polished with **COMPO** immediately after it has been rubbed in.

Invaluable in HOT CLIMATES, as it does not EVAPORATE or DRY out of the LEATHER.

VANNER & PREST,

SOLE MANUFACTURERS AND PATENTEES,

148, ORMSIDE ST., HATCHAM, LONDON, S.E.

TESTIMONIALS.

Messrs. VANNER & PREST, 148, Ormside St., Hatcham, London, S.E.

GENTLEMEN,—I have tried your oil, or mixture for softening leather, and rendering it waterproof. With both harness and boots its effect has been most successful. I tried it on a pair of boots I had in the Crimea, and which had become, from want of use and old age, more like as if they were made of "iron" than of leather. They are now soft and pliable, and could be worn with comfort. My coachman states the effect on the harness and on bridles is most beneficial. I have recommended it should be tried in the Government stores. ARTHUR HERBERT, *Colonel.*

Horse Guards, *May 20th, 1870.*

Messrs. VANNER & PREST, 148, Ormside St., Hatcham, London, S.E.

GENTLEMEN,—I have given the sample of Dubbing which you were kind enough to send on the 19th of February, a fair trial on Boots, Saddlery, and Harness, and find it quite equal to your expectations. It makes all kinds of Leather beautifully soft and flexible, and prevents it from cracking. In short, by an application or two, old straps that have been lying past become like new. I have no hesitation in saying I have not before seen an article of the kind which seems so fitted for its purpose, or so likely to give general satisfaction.—I have the honour to be, Gentlemen, your obedient servant, D. REID, *Captain, Adjutant 1st Depôt Battalion.*

Chatham, *27th March, 1870.*

GEO. J. STEPHENSON & Co.,

MANUFACTURERS OF

Oils, Oil Foots, Greases,

&c., &c.,

OFFICE AND WAREHOUSE—

SCALE LANE, HULL.

Pure Cod Oil for Tanners, Cod Oil Foots, Whale Oil, Whale Oil Foots, all kinds of Fish Oils, and Fish Oil Foots, Linseed Oil, Linseed Oil Foots, Rape Oil, Rape Oil Foots, Colliery Oil, Black Rape Oil, Greases, Varnishes, Tallow, Mucilage, Cotton Oil—Crude and Refined, Petroleum, Colza Oil, &c.

Oils for Soap Manufacturers, &c.

SAMPLES FREE ON APPLICATION.

BY ROYAL LETTERS PATENT.

WILLIAM BOWN,

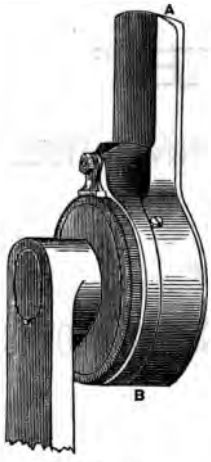
308, SUMMER LANE,

BIRMINGHAM,

SOLE MANUFACTURER OF THE

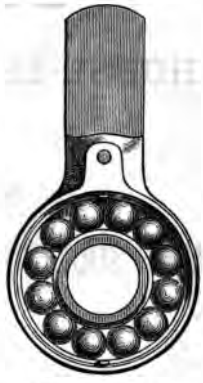
PATENT

ÆOLIUS BICYCLE BEARING.



ELEVATION.

SECTION THROUGH A B OF ELEVATION.



FRONT VIEW WITH CAP REMOVED.

The above views will clearly show the great advantages possessed by this Bearing—from the combination of hardened steel balls and hardened conical surfaces, with the facilities for universally adjusting the Bearing in case of wear—the frictional surfaces and points of contact are reduced to the lowest possible minimum, thereby producing the most complete Bicycle Bearing ever offered to the public.

W. H. HEWITT,

ALBION WORKS,

TENBY STREET NORTH,

BIRMINGHAM,

Wholesale Manufacturer of all kinds of Harness and Saddlery Goods,

COACH & SADDLERS' IRONMONGER;

INVENTOR & SOLE MANUFACTURER OF THE

WORLD RENOWNED

Registered Horse-Shoe Harness Furniture,

NOW TO BE KNOWN AS THE

"CENTAUR"

HORSE-SHOE HARNESS FURNITURE.

MANUFACTURER OF

WHIP SOCKETS, REIN-HOLDERS, CARRIAGE PAD CLOTHS,

DASH STRAPS,

APRON PULLERS, FANCY FRONTS, ROSETTES,

Plated & Brass Goods of every description.

WHOLESALE AND EXPORT.

Philadelphia International Exhibition.

MEDAL & DIPLOMA OF MERIT.

UNITED STATES,

AMERICA, 1876.

AWARDED TO

DEXTER CURTIS,

FOR THE

PATENT ZINC

COLLAR PAD,

FOR THE

PREVENTION OF CRUELTY TO HORSES,

WITH

SPECIAL MENTION FOR ORIGINALITY AND USEFULNESS.

TESTIMONIALS.

VETERINARY ESTABLISHMENT,
56, NEW BOND STREET, LONDON, W.,
14th August, 1878.

DEXTER CURTIS, ESQ.,

SIR,—On several occasions I have used your Zinc Collar Pads, and can testify to their efficacy both in the prevention and cure of sore necks as produced by the chafing of the collar. The ease with which they can be adapted, the simplicity of the article itself, and the very low rate at which it is produced, should recommend it to the notice and use of all horse contractors and cab proprietors, whose horses, as a rule, suffer most.

I am, Sir,

Yours faithfully,

THOS. J. W. DOLLAR, M.R.C.V.S.,

And holder of Veterinary Certificate of H. & S. Society, Scotland.

I HEREBY CERTIFY that I have practically tested the ZINC COLLAR PAD of Dexter Curtis, and I find that they are admirably adapted for the use they are designed for, namely, the prevention and cure of sore necks, caused by the collars of harness horses.

J. M. PARKER, M.R.C.V.S., Birmingham.

BRUXELLES,

July 15th, 1878.

I, THE UNDERSIGNED, Veterinary Surgeon to the Royal Stables of His Highness the Count of Flanders and to the Belgian Government for the City of Brussells, also Founder and President of the "Royal Society for the Prevention of Cruelty to Animals," declare to have used the "DEXTER CURTIS ZINC COLLAR PAD" on my horses with great success.

It preserves the mane and prevents it from breaking and wearing off, and also the neck from becoming sore, and horses with sore necks it cures rapidly; they are therefore indispensable, and should be used for all classes of horses, from the pony to the cart-horse.

Thus the "Dexter Curtis Zinc Collar Pad" is of great value for general use, as it is a preventive against sore necks, and I recommend it to everyone, as it enables horses with sore necks to continue their daily work with ease.

This is the result of my experience, after having given it a good and fair trial on all my horses and on those of my customers, with the greatest success, and I have never known it to fail.

HORACE DOUTERLINGUE,

Veterinary Surgeon, and President to the Royal Society for the Prevention of Cruelty to Animals.

I HAVE great pleasure in testifying to the great value of Dexter Curtis's newly invented ZINC COLLAR PAD, having seen it used on cab and 'bus horses with the best effect.

J. CLAYWORTH, M.R.C.V.S., Birmingham.

As a horse without his natural mane is bereft of beauty as a woman without hair or a tree in summer without leaves, any cheap and simple contrivance that will protect the mane from the inroads of the harness collar, which twists and wears away the hair, should, I think, be thankfully and universally used. This little shield called the Zinc Collar Pad has this merit of preserving the mane intact, and is invaluable to those who find it convenient that their hacks and hunters should be occasionally exercised in harness, but who would be horrified to see these animals with a mutilated mane. To Country and Sporting gentlemen and dealers in high-class horses, the omission of its use almost amounts to neglect.

The collar should not be stuffed at the top or near the shoulder blade, as it becomes heated and causes the shoulder to chafe.

Use the Zinc Collar Pad, which keeps the neck cool, and gives the collar a chance to dry on the shoulders.

Humanity demands that the Zinc Pad should be used on all Cab, 'Bus, and Cart Horses; they are guaranteed to prevent chafing, or cure the worst cases of Sore Neck in from Six to Ten Days, while the horse is constantly at work; or money refunded.

What we claim is :—

1.—The chemical and galvanic action of the zinc with the acid and saline constituents of moist sores, resulting in an astringent acting speedily on the edges of the wound and by its smooth surface and cooling tendency, quickly produces a cure.

2.—It prevents the collar pinching the top of the wither.

3.—It keeps off the water and prevents Scalding.

4.—It protects the top of the collar from wear.

5.—No horse can get a sore neck whilst wearing this plate.

It is well known that the top of the horse's neck is the tenderest part, and that eight out of ten get chafed and sore at this particular spot.

The Horse should have free action of the top of the shoulder blade, and no draft near the top of the shoulder. Humanity says, "make the collar wide and loose at the top, resting firmly on the top of the neck, this prevents the collar working up and down and chafing the shoulders."

These plates produce this desirable effect: to cure sore necks and prevent chafing. It has been known to cure the most irritated sore necks of thousands of horses in the United States.

To fasten the Pad in the collar, run the straps through the seam of the collar, so as to draw the Pad close up in the top.

SOLE PROPRIETOR & PATENTEE,

DEXTER CURTIS,

General Office: 59, TENBY STREET NORTH,

BIRMINGHAM.

Highly Recommended by the Author of "Centaur."